

# Marcon International, Inc.

Vessels and Barges for Sale or Charter Worldwide

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May 2021

## Tug Market Report

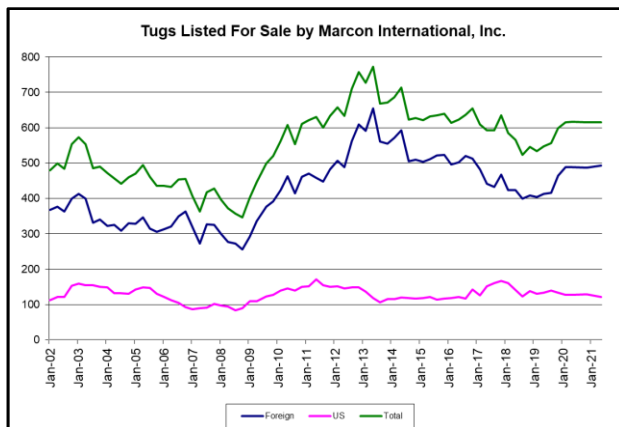
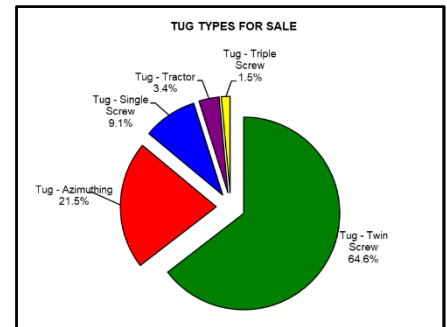


Of the 13,613 vessels and 3,718 barges that Marcon tracked as of May 2021, 5,203 are tugs with 615 officially on the market for sale worldwide, up 81 or 15.17% from one year ago, May 2020, but down eight or 1.28% from May 2016. 93.02% of U.S. and 39.01% of foreign tugboats for sale are direct from Owners. 140 or 22.76% of the tugs worldwide, primarily foreign flagged, were built within the last 10 years, are newbuilding re-sales or currently under construction – compared to 27.07% one year ago and 32.26% five years ago. 84 (13.66%) are over 50 years of age. Ten have no age listed.

The oldest tug Marcon currently has listed is a 47' LOA, 320BHP twin screw tug built in 1931 and is located in the Pacific Northwest. This "old lady" is balanced by three newbuildings between 4,050BHP and 5,630BHP scheduled for delivery in 2021. Two newbuildings are azimuthing for delivery to the Far East and Mediterranean and the third is a traditional twin screw tug for delivery to Southeast Asia.

### Market Overview

The majority of tugs Marcon tracks for sale as of this report are in the US with 125 tugs officially on the market (vs. 128 one year ago), followed by 118 in Southeast Asia (same), 74 in the Mediterranean (90), Far East with 65 (69), 64 in Europe (60), Mid-East with 59 (56), 43 in Latin America (26), 21 in the South Pacific (20), 16 in the Caribbean (same), 11 in Africa (13), 12 where location unstated (16), 6 in Canada (3) and 1 in Southwest Asia (2). Where machinery is known, CAT diesels power 168 or 28% of the tugs listed for sale. This is followed by 74 Cummins, 71 vessels with EMDs, 67 Yanmar, 50 Niigata, 18 Wartsila and 15 Mitsubishi powered tugs. 143 tugs are powered by other machinery from Akasaka to Zibo with one Fairbanks Morse tug on the market.



Five years ago, 32.26% of tugs for sale worldwide, primarily foreign flag, were built within the previous 10 years compared to 22.76% today. Five years ago, 11.24% of the tugs on the market were 50+ years old compared to 13.66% today. At that time, Marcon had two tugs older than 75 years available whereas today there are six. The average age of all tugs that Marcon has for sale worldwide today is 17 years, with 2004 average build date, compared to 25 years, 1991 average built, in May 2016. Southeast Asia had the largest selection of tugs listed in 2016 with 131 available (21.0%). This was followed by 123 in the United States (19.7%), 69 in the Mid East (11.1%), Far East 66 (10.6%), 65 in Europe (10.4%), Mediterranean 55 (8.8%), South Pacific 27 (4.3%), 21 Latin America (3.4%), 20 Africa (3.2%), 18 in the Caribbean (2.9%), 14 Canada (2.2%), 8 in Southwest Asia (1.3%) and 6 where location is unknown (1.0%).

Looking at tugs for sale worldwide, conventional twin screw tugs continue to prevail with 397 (64.6%) available. These are followed by 132 azimuthing (21.5%), 56 single-screw (9.1%), 21 Voith Schneider tractors (3.4%) and 9 triple screw (1.5%). As a comparison to demonstrate the continuing trend in propulsion, five years ago 16.5% of the 623 tugs for sale were single screw, 59.4% twin screw, 21.8% azimuthing and 1.4% VS tractor tugs. As we have been watching the past several years, ASD tugs increased their position in the market further reducing conventional twin screws, while single screw tugs have been mostly relegated to nearly zero commercial work, except in certain specific cases. While it is difficult to get a precise figure related to the scrapping rates of tugs, it's not unreasonable to assume that these will be mostly older single and twin screw units. It is noted that Sea-Web reports 1,588 tugs worldwide scuttled, broken up or to be broken up world-wide. This is up 2.77% from May 2020's 1,544. We believe this will increase over the next year as companies are dealing with the economic fallout of the COVID 19 pandemic in various sectors of the market.

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Details believed correct, not guaranteed. Offered subject to availability.

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Marcon's database shows eight fewer tugs officially for sale than five years ago in May 2016 with largest shifts in the lower horsepower categories. There are 54 fewer tugs are today listed in the 2-3,000HP range with average age increasing from 28 to 32 years. The 3-4,000HP range gained 40 tugs while their average age increased from 22 to 24 years. Under 1,000HP tugs decreased by 20 with a one year decrease in age to 35 years. The 4-5,000HP range increased by 12 tugs with average age rising from 17 to 19 years. Seven more tugs are showing as available in the 7-8,000HP (average age 31 vs 32 now) range, six more 6-7,000HP (average age 17 then vs 16), four fewer 1-2,000HP tugs (average age 30 vs 32 years), three more 5-6,000HP (13 vs 19 years now) and one each more in the 8-9,000HP (average age 25 then and now) and in the over 9,000HP range (average age 23 vs 17 years).

Marcon has closed six sales and one charter so far in 2021 after ending 2020 with 22 sales and charters completed. Many of the 2020 deals were well in the works before the Covid-19 situation developed and oil prices crashed. Throughout most of 2020 and early 2021, the market was extremely slow both domestically and world-wide. We are starting to see a pickup in inquiries as the world is slowly reopening and have multiple sales pending at this time. There is a long way to go. We still see a lot of uncertainty in the market and price reductions for many classes of vessels and barges have not been enough to overcome buyers' hesitancy. To date in 2021, Marcon has recorded the sale of four U.S.-flagged tugs, two 10-11 years old and two 45 years old, and two foreign-flagged tugs, one 22 and the other 40 years old. Tug condition and specific circumstances of the sale / purchase were driving factors behind each of these sales, and sale price numbers reflected this as there is no discernible pattern when comparing the sold vessels' ages to their respective sales price per BHP. In 2020, we sold a total of seven tugs with average age of 47 years, all U.S.-flagged tugs. As we have been seeing an increase in inquiries lately, we are hopeful that a rebound is emerging as more people are vaccinated, Covid-19 slowly subsides and economies turn around with strong fiscal stimulus.

### Recent Marcon Tug Sales & Charters

Marcon has sold six tugs totaling 31,280BHP to date in 2021, after selling or fixing tows for eight tugs totaling 32,250BHP in 2020. In 2019, we sold or chartered 13 tugs totaling 58,060HP. Since our first sale in 1983, Marcon sold or chartered 375 tugs totaling 1,222,277BHP out of 1,523 sales and charters total.

Marcon is pleased to announce that Colombian owners, Intertug, have sold their 1,800BHP twin screw tug "Carex" to US Virgin Island based buyers. Built in 1981 at Garber Shipyard, Berwick, Louisiana, the tug is powered by twin Cummins KTA38. It measures 65' x 26 x 10' depth of hull. It will be reflagged to the Antigua registry. Marcon was the sole broker in the transaction.



Crowley Marine Services Inc. has sold two of their 7,200BHP Invader series tugs, "Stalwart" and "Bulwark", to private Washingtonian interests. The vessels were built in 1976 as Hulls # 219 and # 221 at McDermott Shipyard Inc, Amelia, LA. The vessels measure 136.2' loa x 36.5' beam x 19.2' depth and are powered by twin EMD 20-645E5 diesels with Falk 4.345:1 gears driving two 132" x 82-88" 5-blade stainless props. Electrical service is provided by two

105kW CAT D3304 gensets. The tankage onboard includes 155,000g of fuel and 15,000g of water. On deck the towing equipment consists of a double drum Markey TDSDW 36C towing winch capable of spooling two lengths of 2,800' x 2.25" wire. The tugs were constructed by McDermott for Crowley. Marcon acted as sole broker.



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Marcon International, Inc. is pleased to announce the sale of two 1,800BHP U.S. flag sister tugs “*Millie Cruz*” and “*Dana Cruz*” to private buyers. The tugs were built in 2011 and 2010, respectively, at Fred Wahl Shipyard in Oregon as special purpose shallow draft tugs with ABS loadline making them suitable for both coastal and river work in Alaska. They measure 92.0' loa x 88.0' lbp x 36.0' beam x 8.5' depth x 3.80' light draft x 5.80' loaded draft with capacities for 23,000 gallons of fuel, 500 gallons of lube oil, 2,000 gallons of potable water (plus 2,000gpd water maker), and 25,000 gallons of ballast water. Each sister is fitted with two 45 ton Nabrico makeup winches, a Markey DESM-18S bow winch, Palfinger PL12000 MB crane, and Markey TES-22 Single Drum towing winch with 1,500' x 1.375" wire capacity. The tugs are fitted with three CAT C18 Tier II main engines generating a total of 1,800BHP at 1,800RPM, driving three fixed pitch propellers via CAT 5202 3.42:1 gears. Bollard pull is estimated at 33,000 pounds. Marcon acted as the exclusive broker in both transactions.



As its first completed sale of 2021, Marcon International, Inc. is pleased to announce the sale of the ocean salvage and rescue tug “*Hulk*” (ex - “*Resolve Monarch*”, ex - “*Anglian Monarch*”) from Star Matrix Hong Kong, Ltd. to Japanese Buyers. The 11,400BHP ocean work horse was built in 1999 as the ETV “*Anglian Monarch*” at Matsuura Tekko Zosen; Japan as Hull No. S-510 for J.P. Knight Lowestoft, Ltd. of the United Kingdom. She was one of the first units of the UK's Emergency Towing Vessel Fleet (ETV) provided by JP Knight, and funded by the MCS and the fleet. The initial contract ran from 1999 to 2001, and the contract was taken over by Klyne Tugs of Lowestoft in 1999, which signed an eight-year contract executed in 2001, that eventually ran until September 2011 after a two-year extension. The ETV fleet was based in the Shetland Islands and was mainly a government driven response to the oil spill in 1994 from the tanker MV “*Braer*”. The tugs were stationed throughout the region and were operational 24 hours per day, 365 days per year. The contract was eventually cancelled as part of cost cutting measures undertaken by the UK DOT in its spending review and the ETV was no longer funded by the UK. In 2011 the tug was mothballed, along with three other tugs to save money. She was then moved to work on an ETV contract with the French government patrolling that country's coast and she completed her work there in 2013. Later that same year she was sold to Resolve Towing & Salvage for operations in that company's fleet world-wide. The tug successfully worked for that company until acquired by Star Matrix in late 2019 and she carried out numerous tows of rigs, as well as engaging in various salvage operations on a world-wide basis right up until her delivery to the new Owners in Japan in late February 2021.

The purpose built salvage / rescue tug has dimensions of 190' x 46.3' x 23.3' depth with a 19.4' loaded draft. Her twin Niigata 6MG41HX diesels provide 11,400BHP @ 500RPM and 152 tons of bollard pull and her 293,000g fuel capacity gives her a range of about 8,000nmi. Her maximum free running speed is 17 knots and her economical speed is roughly 11 knots. She has twin CP propellers in fixed kort nozzles and is very maneuverable with Kamewa transverse tunnel thrusters (900HP on the stern and 1,200HP on the bow). She also has independently controlled ‘fish tail’ rudders and a Kamewa Poscon fully integrated joystick control. She is fitted with two remotely operated Fifi monitors and has a self-drenching system for close in firefighting in emergency situations. Her Manabe Zoki Co., Ltd. Double Drum Waterfall towing winch carries 1,500m x 71mm towing wire on each drum and 300 ton brake capacity. She is also fitted with the necessary related items for towing such as a 250 ton SWL stern roller, two 10 ton tuggers, and 500 ton SWL Karm forks for handling up to 102mm chain. She carries crew in 10 cabins and has additional room for six passengers as necessary in three double cabins.



### Featured Tugs Available for Sale



**File: TG20152 Tug - Single Screw:** 100.0' loa x 29.0' beam x 13.5' depth. Built in 1979 by Jakobson Shipyard; Oyster Bay, NY. U.S. flag. GRT: 198. ABS + A1 Towing Service + AMS (Expired 1988). FO: 23,000g. FW: 2,600g. BW: 13,225g. No winch, but fitted with double plate & reinforced deck & capstan. Main Engine: 1 x EMD 16-645E2 total **1,950BHP**. 1 - 108" x 83.5" FP prop. Kort nozzle. Endurance 7 days. **Bollard Pull: 30T**. Speed about 13kn free. Pump: 250gpm fire. Gensets: 2 - 75kW / GM6-71. 5 crew cabins. Galley. 29.5' highest fixed point.

**Height of eye: 24'.** Steering kort nozzle. Works in harbor service. Reportedly in good condition. **U.S. Northeast.**



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**File: TG24147 Tug - Twin Screw:** 95.1' loa x 29.5' beam x 13.9' depth x 12.80' loaded draft. Built in 1999 by Jiangdong; Wuhu, China. Venezuela flag. GRT: 250. LR +100A1 Tug, +LMC disc. Jan 2014. Dwt: 177mt. 90m2 clear deck. FO: 47,000g. FW: 31m3. Winch: Towing / AH Winch + 65T tow hook. Line Pull: 30T. Main Engines: 2 x Yanmar M220EN total **2,400BHP**. 2 - FP props. Kort nozzles. **Bollard Pull: 30T**. Speed about 11kn. Gensets: 2 - 77kW / Cummins 6BT5.9-G2M 400vAC 50Hz. Firefighting: 1 - 300m3/hr Water/Foam Mix. Quarters: 8. AirCon. Galley. Offered for sale. Oil dispersant spray booms (82lts/min). **Caribbean.**



**File: TG26101 Tug - Twin Screw:** 100.0' loa x 25.0' beam x 11.3' depth x 11.00' light draft x 14.00' loaded draft. Built in 1944 by Luders Marine; Stamford, CT. Rebuilt: 2008. U.S. flag. GRT: 143. Class: None. FO: 52,000g. FW: 3,500g. Winch: Parkersburg single drum with underrider drum. Wire: 2,000' x 2" & 800' x 1.75". Main Engines: 2 x GM 16V149TI total **2,800BHP**. 2 - 87" x 84" SS FP props on 7.5" shafts. Main engines & gears completely rebuilt 2008. Gensets: 2 - 75kW / GM 4-71. Rebuilt or low hour. Quarters: 10 berths. 47' highest fixed point. 20' eye level. Upper house is aluminum; lower house steel. Push knees fitted forward. **U.S. Northwest.**

**File: TG29090 Tug - Twin Screw:** 90.0' loa x 33.0' beam x 14.9' depth. Built in 1981 by Main Iron Works. U.S. flag. GRT: 163. ABS Loadline, USCG COI Sub M - exp. July 20, 2023. FO: 50,617g. FW: 880g. BW: 5,410g. Winch: 1 - Capstan aft. Main Engines: 2 x EMD 12-645E6 total **3,000BHP**. 2 - FP 102" dia. 4-blade props. Kort nozzles. Gensets: 2 - 75kW / John Deere 4045TF285. Quarters: 8 bunks. AirCon. Galley. Recently completed a dry-dock in 2020 and ABS Loadline issued. Fresh water ballast only. **U.S. Southeast.**



**File: TG30096 Tug - Twin Screw:** 88.6' loa x 29.8' beam x 11.8' depth x 10.50' loaded draft. **Built in 2012** by Damen Shipyards Kozle; Hardinxveld, NL. Marshall Islands flag. GRT: 167. ABS A1, AMS, ACCU. Special survey due Mar 2025. Dwt: 200mt. Light Disp.: 312mt. FO: 125m3. FW: 30m3. Crane: Heila 5.3mt @ 18.03m. Winch: Double-drum R-AHW-H-1000. Line Pull: 100mt. Wire: 650m x 40mm, 400m x 40mm. Main Engines: 2 x CAT 3512C total **3,000BHP**. 2 - FP props. Kort nozzles. Approx. 8,950 hours on main engines. Bowthruster 200HP. **Bollard Pull: 39.4mt**. Speed about 11.9kn. Gensets: 2 - CAT C4.4TA / 85.5kVA 50Hz 3ph. Quarters: 7 in 5 cabins. AirCon. Galley. Damen Shoalbuster 2709 anchor-handling tug. Double-drum waterfall towing and anchor-

handling winch. 120mt holding power. 8mt Brevini tugger winch. Twin screw with bow thruster, so highly maneuverable. CAT C-09TA 361 HP auxiliary engine with hydraulic pump for bow thruster and towing winch. Recently drydocked and class renewed with switch to ABS (formerly BV). Engine ran weekly. **U.S. East Coast.**

**File: TG31030 Tug - Twin Screw:** 105.0' loa x 30.0' beam x 14.5' depth x 9.50' light draft x 12.00' loaded draft. Built in 1981 by Bollinger Shipyard; Lockport, LA. U.S. flag. GRT: 140. ABS International Loadline exp. Jun 2025. Sub-Chapter M exp. Dec 2025. FO: 65,000g. FW: 15,200g. Winch: Intercon D/D200 double drum; GM6-71 powered. Line Pull: 95T. Wire: 2,400' x 2". Main Engines: 2 x CAT 3516 total **3,250BHP**. 98" x 97" FP props on Stainless steel shafts. Kort nozzles. **Bollard Pull: 40.8ST**. Speed about 12kn. Gensets: 2 - 75kW / GM6-71. Quarters: 11 in 5 cabins. AirCon. Galley. Small upper pilothouse to be included in any sale with height of eye at 45'. ITC Tonnage: 292G / 87N. Currently working. **U.S. Gulf Coast.**



**File: TG32053 Tug - Twin Screw:** 105.0' loa x 30.2' beam x 14.7' depth x 12.50' loaded draft. Built in 2007 by Rushan City Shpbldg. Co.; China. Foreign flag. GRT: 279. LR +100 A1 Tug +LMC. Dwt: 83mt. Light Disp.: 284mt. 85m2 clear deck. FO: 258m3. FW: 24.1mt. BW: 14.2mt. Winch: Thor TH-15HTW-MO8-202B. Main Engines: 2 x Cummins KTA50-M2 total **3,200BHP**. 2 - FP props. **Bollard Pull: 40T**. Speed about 12kn. Gensets: 2 - 115kW / Cummins 6CTA8.3-G 400vAC 50Hz. Firefighting: 300m3/h. Quarters: 10 crew. AirCon. Galley. **Central America.**

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**File: TG32170 Tug - Twin Screw:** 105.0' loa x 29.9' beam x 13.8' depth x 15.48' loaded draft. Built in 2007 by ST Shipbuilding Co; Malaysia. Mexico flag. GRT: 296. BV I + Hull, \*MACH Tug Unrestricted (exp. Jan 2018). FO: 64,250g. FW: 8,622g. BW: 24T. Winch: Hydraulic double drum. Line Pull: 40T. Wire: 2 - 700m x 52mm. Stern Roller. Main Engines: 2 x Cummins KTA-50-M2 total **3,600BHP**. 4-blade Mag / Bronze props on 7.5" S/S shafts. Kort nozzles. **Bollard Pull: 46.4T**. Speed about 11kn on 75gph. Gensets: 2 - 125kW / Cummins 6CTA8.3, 1 - 32kW 415v 3ph. Quarters: 2 single, 5 double. AirCon. Galley. Steel hull construction. Twin screw tug. Raised foc'stle. Tug sank in 2017. Needs repairs. Reduced price. Tug partially sank at the dock in 2017 with engine room submerged. **U.S. Gulf Coast. Prompt.**



**File: TG34121 Tug - Twin Screw:** 100.0' loa x 26.8' beam x 9.7' depth x 14.60' loaded draft. Built in 1967 by Main Iron Works; Houma, LA. Rebuilt: 2003. U.S. flag. GRT: 188. ABS Coastwise Loadline. Exp Dec 2016. FO: 38,000g. FW: 1,400g. Winch: Almon Johnson. Wire: 2,000' x 2". Main Engines: 2 x CAT 3516 total **3,420BHP**. 2 - 88" x 72" FP props on Stainless steel shafts. Repowered from CAT D398TAs in 1995. **Bollard Pull: 75,530lb**. Gensets: 2 - 40kW / John Deere 120vAC 60Hz. Firefighting: Fixed CO2

in engine room. 8 crew in 4 cabins. Formerly fitted with an upper pilothouse / removed in 2017 with vessel engaged in ship docking duties thereafter. 22' 7" height of eye, with air draft 44'. 8 person life raft. 1,200' 9" circ. Emergency hawser. Normally operates with crew of 5. Reportedly in good condition. **U.S. Northeast.**

**File: TG36027 Tug - Azimuthing:** 111.6' loa x 35.5' beam x 13.78' loaded draft. Built in 1982 by Carrington Slipways Pty Ltd; Australia. Australia flag. GRT: 396. LR +100 A1 Tug. +LMC, UMS. Special Survey due Nov 2022. Winch: 2 - Norwinch fwd & aft. Main Engines: 2 x Daihatsu 6DSM28 total **3,521BHP**. 2 - Niigata ZP-3B props. **Bollard Pull: 46mt**. Gensets: 2 - CAT. **Australia. Q3 2021.**



**File: TG39015 Tug - ATB - Twin Screw:** 116.0' loa x 32.0' beam x 14.5' depth x 15.20' loaded draft. Built in 1977 by Modern Marine; Houma, LA. U.S. flag. GRT: 187. ABS International Loadline. FO: 97,343g. FW: 1,362g. DW: 8,193g. Winch: Jon Rie Hydraulic Capstan. Wire: 720' x 9" Hawser. Main Engines: 2 x EMD 16-645E6 total **3,900BHP**. 2 - 188"x101.7" stainless props. Gensets: 3 - John Deere. Firefighting: Fixed CO2. 9 berths in 6 cabins. AirCon. Galley. AT/B tug formerly working with 14,398dwt double hull ocean tank barge. Intercon "C" coupler system. Raised pilothouse. 65' air draft with **40' upper height of eye**. 3,000g holding tank with Type II EMI MSD. ITC Tonnage: 407G. Owner interested in selling "as is, where is". **U.S. East Coast.**

**File: TG39144 Tug - Twin Screw:** 140.0' loa x 34.0' beam x 17.0' depth x 12.00' light draft x 15.00' loaded draft. Built in 1971 by Halter Marine; New Orleans, LA. U.S. flag. GRT: 196. ABS Loadline exp. Jun 2021. FO: 177,790g. FW: 7,945g. DW: 21,290g. BW: 24,745g. Winch: Markey TDSD-36B 2-drum & 3rd drum. Line Pull: 40-50T. Wire: 2 - 2,600' x 2.25" & 1 - 2,000' x 2". Main Engines: 2 x EMD 16-645E2 total **3,900BHP**. 110" x 58" 5-blade stainless props. **Bollard Pull: 57T**. Speed about 12-14kn on 122-166gph. Gensets: 2 - 99kW / GM 8V71. 16 in 6 cabins. AirCon. Galley. Foc'stle bow. **U.S. West Coast.**





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**File: TG39149 Tug - Twin Screw:** 100.0' loa x 30.1' beam x 12.4' depth. Built in 1977 by Chromalloy American Corp. U.S. flag. GRT: 182. ABS Loadline exp. Aug. 2021. FO: 40,000g. FW: 14,700g. Winch: None. Main Engines: 2 x EMD 16-645E2 total **3,900BHP**. 2 - 86" x 56" 4-blade FP props. Repowered 1982 / Orig. 567 blocks, bored out to 645s. **Bollard Pull: 32T**. Gensets: 2 - 60kW / GM6-71. AirCon. Galley. Harbor tug. Fitted with vertical capstan and H-bitt. **U.S. Gulf Coast.**

**File: TG40124 Tug - Twin Screw:** 124.0' loa x 31.5' beam x 15.8' depth x 14.50' light draft x 15.00' loaded draft. Built in 1966 by Nolt J. Theriot; Golden Meadow, LA. Rebuilt: 2007. U.S. flag. GRT: 180. ABS International Loadline Exp. June 2022. USCG COI Sub. M Certified. Light Disp.: 783lt. FO: 75,000g. FW: 5,000g. Winch: Almon Johnson Single Drum + pendant drum & gypsy / GM6-71 diesel powered. Line Pull: 62.5T. Wire: 2,600' x 2.25". Main Engines: 2 x EMD 16-645E total **3,900BHP**. Last Overhauled: 2007. 2 - FP 96" x 109" 4-blade SS props on 11" shafts. Kort nozzles. Repowered 91. 8/07 Tier I compliant (via add-on kit)/CM3500, 35" clutches. **Bollard Pull: 66ST**. Speed about 12kn. Gensets: 2 - 85kW / John Deere 480vAC 60Hz. Quarters: 3-1, 1-2 pax cabin. AirCon. Galley. Standard bow. Vessel underwent a major top to bottom overhaul 2007, plus she was upgraded to EPA Tier I approved. Owner reports emissions compliant for California Waters until December 31, 2022. Nautican kort nozzles with quad rudder system. Hydraulic towing pins. Towing winch rebuilt Nov. 2011. Main engines overhauled September 2017, plus full 5 yr. ABS Loadline renewal (blast, paint, etc.). Working spot market. Owners will consider sale, or long term Bareboat Charter. Contact Marcon for tow quotes, charter rates, etc. Owners keen to sell. **REDUCED price ideas. U.S. West Coast. Prompt.**



**File: TG47711 Tug - Azimuthing:** 111.3' loa x 35.5' beam x 17.7' depth. Built in 1986 by Australian Shipbuilding, Australia. Australia flag. GRT: 470. LR+100A1, +LMC, UMS SS due Nov 2021. Winch: Hagglund fwd. and aft. Main Engines: 2 x Daihatsu 8Z 280-ET total **4,747BHP**. 2 - Niigata Z-Peller props. **Bollard Pull: 43mt**. Gensets: Cummins. **Australia.**

**File: TG65136 Tug - Twin Screw:** 136.0' loa x 34.0' beam x 18.0' depth x 13.00' light draft x 16.00' loaded draft. Built in 1976 by Service Marine; Amelia, LA. U.S. flag. GRT: 163. ABS. International Loadline / Expired. Vessel is in lay-up. FO: 143,275g. Winch: Intercon double drum/GM 6-71. Line Pull: 60T. Wire: 5,000' x 2 1/4", 2,400' x 2 1/4". Stern Roller. Main Engines: 2 x EMD 16-645 total **5,700BHP**. Last Overhauled: Rebuilt 2003. 138" x 94" 4-blade SS in-board turbo props on 12" shafts. Repowered 1993/94. Gensets: 2 - 99kW / John Deere 6068T 280vAC. 12 in 7 cabins. AirCon. Galley. Bow pud, "D" fendering. **U.S. Northwest.**



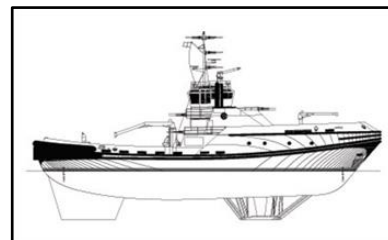
**File: TG72164 Tug - Twin Screw:** 136.2' loa x 36.5' beam x 19.2' depth x 17.00' light draft x 20.00' loaded draft. Built in 1976 by McDermott Shipyard; Amelia, LA. U.S. flag. GRT: 199. ABS Loadline. FO: 155,000g. FW: 15,000g. Winch: Markey double TDSDW 36C. Wire: 2 - 2,800" x 2.25. Stern Roller. Main Engines: 2 x EMD 20-645E7B total **7,200BHP**. 132" x 82-88" 5-blade stainless props. **Bollard Pull: 75ST**. Speed about 16kn free. Pumps: Fuel, fire & bilge. Gensets: 2 - 105kW / CAT3304. 10 crew in 5 cabins. AirCon. Galley. Triple rudders for close-quarter maneuverability & steering power to handle large tows. Hydraulic tow pins. **U.S. Northwest.**

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## Tug Boat Market Report – May 2021

### File: TG99154 / TG99158 Tug – Tractor (Two Available Separately or En-bloc):

153.0' loa x 48.0' beam x 20.0' depth. Built in 1999 by Dakota Creek Ind.; Anacortes, WA. U.S. flag. GRT: 484. ABS + A1, FiFi-1, Towing, U.S. Domestic Service + AMS. Special Survey due Jan/May 2024. FO: 123,280g. FW: 17,800g. BW: 50,000g. Crane: 2 - No. American 12T aft & 2T fwd. Markey DYSDS-62 aft hawser winch & hyd. capstan. Stern Roller. Main Engines: 2 x CAT 3612B DITA total **10,192BHP**. Voith Schneider 36GII/270 props. CAT 3306DITA dedicated hydraulic power. Fernstrum keel coolers. **Bollard Pull: 92.25T**. Speed about 15-16kn max. Pumps: 2 - Nijhuis 6,600gpm. Gensets: 2 - 190kW / CAT 3306DITA AC. **FiFi-1**. 2-5284gpm Skum remote monitors. Waterspray. Foam: 10,000g. Total 16 in 8 cabins. Guido Perla design, ice strengthened tug for tanker escort, ocean towing, firefighting & emergency spill response working with 180,000dwt tankers. Raised foc'stle bow. Ice belt. 2,250ft<sup>2</sup> heated decks fore & aft & headed cranes & deck machinery. Hydraulic stern staple. Capable of applying up to 210,500lbs of static bollard pull in most directions & up to 340,000lbs of indirect pull at 10kn. Fitted with Schuyler "D" shape WWR-2B upper cylindrical & SR3D-2 lower course rubber fendering. Shibata cylindrical fendering around stern. All machinery spaces fitted with wing tanks for double-side protection. Desmi surface oil skimmers. Recovered oil capacity 43,000g. Oil dispersant approx. 5,000g. Two reels with capacity of total 3,630' ocean-class boom. Space for two 20' boom handling skiffs on main deck. 2 - 10 person liferafts. ITC Tonnage: 1,046G / 313N. Owner will consider sale with non-compete for US West Coast. **U.S. Northwest.**



### Worldwide Number of Tugs

While information in *IHS Fairplay Sea-web* only covers "sea-going" vessels over 100GRT, there are many tugs either under that tonnage or in inland service. According to Sea-web, as of 7 May 2021, there were 20,222 "sea-going" tugs over 100GRT worldwide, up from 19,693 (2.69%) and 17,917 (12.86%) in May 2020 and 2016, respectively. Total horsepower is 55,139,298BHP, up 1,487,166BHP (2.77%) over the past year. Even considering flags of convenience, the largest national fleet of tugs over 100GRT continues to be under Indonesian flag with 5,038 tugs totaling 8,843,904BHP. The U.S., as the second largest national fleet of tugs, operates 1,482 "sea-going" tugs over 100GRT, or 7.33% of the world market, totaling 5,537,210BHP (10.04% global BHP). Average age of tugs worldwide is 22.7 years (built 1999) with the U.S. flag "sea-going" fleet at 34.3 years (built 1987). The "Unknown" flag group is 10.53% of the world market, comprised of 2,130 tugs totaling 3,832,717BHP or average 1,799BHP each with an average age of 34.2 years. This large "Unknown" group indicates to us that older tugs may be falling off the radar.

Top 25 "Sea-Going" Tug Fleets by Units as Of May 2021 According to IHS Fairplay Sea-Web

Flag	Total BHP	%	# Tugs	%	Avg BHP	Avg Age
Worldwide	55,139,298	100.00%	20,222	100.00%	2,727	1999
Indonesia	8,843,904	16.04%	5,038	24.91%	1,755	2010
United States Of America	5,537,210	10.04%	1,482	7.33%	3,736	1987
Unknown	3,832,717	6.95%	2,130	10.53%	1,799	1987
Japan	2,732,919	4.96%	759	3.75%	3,601	2005
Korea, South	1,876,589	3.40%	595	2.94%	3,154	1997
Russia	1,557,773	2.83%	538	2.66%	2,895	1994
Panama	1,381,117	2.50%	440	2.18%	3,139	1995
Malaysia	1,244,682	2.26%	534	2.64%	2,331	2006
Singapore	1,260,583	2.29%	456	2.25%	2,764	2011
India	1,451,688	2.63%	490	2.42%	2,963	2001
Philippines	664,206	1.20%	284	1.40%	2,339	1982
St Vincent & The Grenadines	821,618	1.49%	201	0.99%	4,088	2007
Turkey	1,150,343	2.09%	314	1.55%	3,664	2006
Italy	1,093,559	1.98%	283	1.40%	3,864	1995
Brazil	1,102,002	2.00%	275	1.36%	4,007	2005
United Kingdom	854,394	1.55%	248	1.23%	3,445	1998
China, People's Republic Of	863,984	1.57%	252	1.25%	3,429	1997
United Arab Emirates	575,135	1.04%	182	0.90%	3,160	2004
Iran	563,034	1.02%	244	1.21%	2,308	1993
Australia	1,071,803	1.94%	260	1.29%	4,122	2002
Spain	691,614	1.25%	182	0.90%	3,800	1996
Nigeria	508,210	0.92%	180	0.89%	2,823	1992

# Marcon International, Inc.

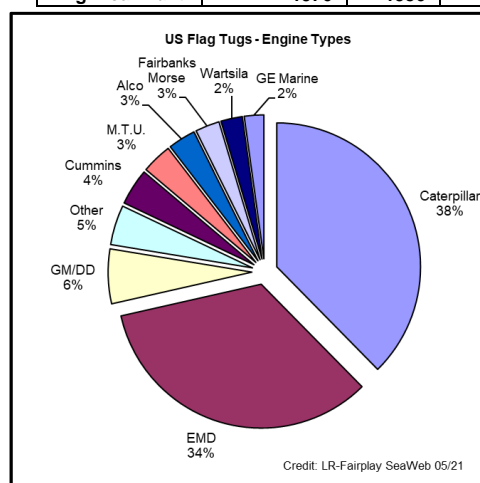
## Tug Boat Market Report – May 2021

### Breakdown of U.S. “Sea-Going” Fleet

Following is a breakdown of the U.S. sea-going tug fleet as of May 2021, according to IHS Fairplay Sea-web, compared with May 2020. As of May 2021, the U.S. domestic tug fleet consisted of 1,482 “sea-going” tugs totaling 5,537,210BHP. The U.S. flag fleet increased by 24 or 1.65% and total horsepower by 132,155BHP or 2.46%. The fleet’s average age increased to 34.3 years. This coincides with what we have seen in the market but we expect to see more older units scrapped as a result of post-merger fleet consolidations and continued economic restrictions. High horsepower and large tugs are easy to track, but Sea-web has data on only 40 U.S. tugs under 999BHP. As most “under 1,000HP” U.S. tugs are below 100 GRT, they are not in the Registry. Not counting pushboats, there are eight to nine hundred additional small tugs within U.S. coastal waters.

U.S. Sea-Going Tug Fleet Over 100GRT By BHP According to Lloyd's Register as of May 2021

	Unknown BHP	Under 999	1000-1999	2000-2999	3000-3999	4000-4999	5000-5999	6000-6999	7000-7999	8000-8999	9000 Plus	Total
Total #	102	40	210	197	277	269	138	134	45	14	56	1,482
Avg. BHP		801	1,521	2,369	3,417	4,347	5,365	6,445	7,215	8,225	11,364	
Avg. LOA	87	77	85	97	104	105	106	109	143	135	153	
Avg. Beam	28	23	26	30	32	35	36	39	40	42	48	
Avg. Depth	11	9	11	13	15	16	17	18	20	21	24	
Avg. Year Built	1976	1956	1969	1977	1982	1996	2002	2008	1988	2007	2008	1987



Of the 1,482 U.S. tugs in Sea-web, 161 have unknown engines. 497, or 34% where type is known, are powered by CATs, 447 (30%) by EMDs, 81 (5%) by General Motors / Detroit Diesels, Cummins with 4%, Alco and M.T.U. (Rolls Royce) are tied with 3% each and Fairbanks Morse, GE Marine and Wartsila have 2% each of the market share. 293 (20%) and 811 (55%) are conventional single and twin screw, respectively. 318 azimuthing (21%), 38 triple screw (3%) and 23 Voith tractor tugs (2%) make up the remaining 25%. Five years ago, of 1,489 U.S. flag tugs, 496 or 38% were powered by EMDs, 418 (32%) by CATs and 109 (8%) by GM / DD. Compared to five years ago, EMDs lost eight percentage points, GM / DD lost three percentage points, Alcos lost one percentage point but CATs gained one percentage point. In regards to propeller types, today there are 54 fewer single screw, 15 more twin screw and 31 more azimuthing U.S. flag tugs compared to the fleet statistics in May 2016.

### Worldwide Articulated Push Tugs Fleet

According to IHS Fairplay Sea-web, as of 7 May 2021, there are 247 articulated push tugs above 199GT worldwide. 68.02% or 168 are U.S.-flagged with average 6,337BHP and average age of 23 years - with many older units being conversions of conventional tugs. The second largest fleet with 16 ATB tugs is attributed to “unknown flag”, followed by seven each flagged in Canada, Liberia and South Korea. The remaining 42 are spread among 19 countries. The average age of non-U.S. flagged articulated push tugs is 32 years with average 4,455BHP. Of total tugs worldwide, ATB tugs make up 1.12%. However, in the U.S., articulated push tugs account for 9.90% of all tugs. Since May 2020, there are 23 more ATBs in the U.S. and three more under foreign flag. Average age in the U.S. increased by four years from 19 to 23 years old, while outside the U.S., average year built remained at 1990, which increased average age by one year. The youngest ATB fleets sail under Liberian and Russian flag with 2020 as the average year built. Jamaica has the oldest ATB, a 4,734BHP 1944-built unit.

Sea-web Articulated Push Tugs Summary as of 7 May 2021							
	Total BHP	%	# Tugs	%	Avg BHP	Avg Age	Age in Years
US	1,064,557	75.15%	168	68.02%	6,337	1999	23
Foreign	351,926	24.85%	79	31.98%	4,455	1990	32

Marcon is currently tracking 132 ATB tugs worldwide with 23 currently for sale, ranging in age from three to 48 years old. Of these 23, 21 are in the U.S. and one each are in Canada and Europe. With the increased popularity of ATB units, it is interesting to see the changes in fleet sizes beyond U.S. borders.



# Marcon International, Inc.

## Tug Boat Market Report – May 2021

### New Construction & Shipyard News

As of June 10, 2021, the most recent date available, **Colton Co.**, which reports on recent deliveries from U.S. shipyards, reported nine tugs delivered to date in 2021. This compares to 16 tugs in 2020, 27 tugs in 2019, 39 tugs in 2018 and 24 tugs delivered in 2017.

2021 Deliveries of Tugs Sorted by Owner/Operator					
Name	Builder	Owner/Operator	Type of Vessel	GT	Date
George M	Gulf Island Jennings	Bay-Houston Towing	6,000-hp Escort Tug	297	07-Jan-21
Aurora	Master Boatbuilders	Crowley Marine	ATB Tug	291	15-Mar-21
Rachael Allen	Nichols Bros BB	Foss Maritime	6,866-hp Tug	196	12-May-21
North Arm Tempest	ABD Enterprises	In Vancouver BC	20m Tug	141	11-Feb-21
Wyatt Moran	Washburn & Doughty	Moran Towing	6,000-hp Tractor Tug	190	25-Mar-21
Janice Ann Reinauer	SENESCO	Reinauer Tptn.	ATB Tug	199	29-Jan-21
Agamenticos	Dakota Creek Ind.	U.S. Navy	Yard Tug	420d	21-May-21
Adrienne M Moore	Main Iron Works	Unknown	-hp Tug	196	09-Apr-21
Cape Henry	Chesapeake SB	Vane Bros. Towing	3,000-hp Escort Tug	224	18-Mar-21

The **General Directorate of Coastal Safety** had signed a contract with **UZMAR Shipyard** for two emergency response and escort tugboats needed to ensure safety in the Turkish Straits. One of the tugboats built in the 32-meter-long RASTAR 3200W model with a towing capacity of 80 tons was named as “*Kurtarma 13*”. Basic services of RASTAR 3200W series of tugboats with high maritime, maneuver and escort



capability in its class in the world; ship rescue services, ship escort, towing and pushing services, tug services, port services, fire-fighting services, stand-by duties. Each tug will be shipped with two marine diesel engines driving two variable pitch ASD propellers. The landing date of the second of the tugboats is scheduled for February (2021). UZMAR is preparing to set a new record by building both tugboats in record time and to the highest standards. Following the launching moments broadcast live on YouTube, UZMAR Board of Directors Ahmet Noyan Altuğ said: “*The tugs we will*



*build for KEGM are a prestige project for UZMAR. We represent the Turkish maritime culture starting from the spirit of YDO (Higher Maritime School). YDO gave us food, gave us a job. Thanks to our state and the Ministry of Transport and Infrastructure, we are now among the few companies that produce tugboats and work boats in the world. We also produce these tugs to be built for our Coastal Safety at world standards. We build the best quality tugboats in the world to our own state. Fortunately, our ‘Kurtarma 13’ tug safely met the sea today. On this proud day, although we could not host guests in our shipyard in line with pandemic measures, we had the opportunity to watch the landing moment by moment via live broadcast. Let the bow of our tugboat be clear, good luck to our state, our nation, our Ministry of Transport and Infrastructure, our General Directorate of Coastal Safety, our sailors and our seas.”*

The RASTAR 3200W vessels were to set sail for the Americas from the port of Izmit mid-March. Featuring a state-of-the-art design, they will provide services for the Energía del Pacífico LNG terminal. **SAAM Towage**’s fleet will expand further in a few more days by incorporating two new vessels, “*SAAM Acaxual*” and “*SAAM Centzunat*”, designed by Robert Allan Ltd. They will provide services at the Energía del Pacífico (EDP) liquefied natural gas (LNG) terminal in El Salvador. The first step was for SAAM to sign delivery protocol and project close documents with **UZMAR**, the shipyard that built the vessels. The new tugs were handed over to the Dutch company Redwise Maritime BV, which will transport them from the port of Izmit (Turkey), through the Panama Canal, to their final destination in Acajutla (El



Salvador). The journey should begin March 12th and take approximately 40 days. SAAM already had a positive experience with UZMAR, which built its “*Tsimshian Warrior*” tug, the first IMO TIER 3 tug in the company’s fleet and the first of its kind operating in Canada. The new RASTAR 3200W tugs measure 32 meters long and were especially designed to meet the needs of the Acajutla gas terminal, with bollard pull of more than 80 tons and a speed of over 13.5 knots. Each vessel has two CAT 3516C 2350 kW engines and Kongsberg US255 FP azimuth thrusters. Their design features, equipment and construction meet the highest standards of the “*escort*” and “*fire-fighting 1*” notations, based on Bureau Veritas classification standards, along with the highest safety standards for operating at LNG terminals, as defined by our customer.

# Marcon International, Inc.

## Tug Boat Market Report – May 2021

The concept of “hybrid tug” is getting a whole new definition with an innovative new tug under construction at Turkey’s **Uzmar Shipyard** for the **Danish Port of Aarhus**. From the outside it looks very similar to other Robert Allan Ltd-designed tugs built at the Uzmar yard. The RAmports 3000 ASD tug, to be named “*Hermes*” is 30.25 by 11.75 meters. In the engine room and in the thruster rooms of the azimuthing stern drive (ASD) tug, the innovations are revealed. A pair of Cummins QSK60 IMO stage II compliant engines, each send 2,700HP (2,013kW) to the SCHOTTEL RudderPropellers type SRP 430 azimuthing thrusters. Most ASD tugs have the thrusters in a separate room, so also does the Uzmar tug, but an additional drive shaft links the port and starboard thruster units. The remarkably simple innovation, designated SYDRIVE-M, allows one engine to be shut down, when the tug is not actually handling a ship, while the other engine provides adequate power to both thruster units. Since harbor tugs spend considerable time running at low load levels between docks, this can result in significant reduction in emissions, fuel costs and, over time, maintenance costs. With both Cummins engines powering the fixed-pitch, nozzled, 2.5-meter props on SCHOTTLE thrusters the tug will have a 12.5 knot free-running speed and a 65-ton bollard pull. In another configuration, the power of the starboard engine can be dedicated to a large fire pump mounted to the front end of the engine. At the same time, the power of the port engine is committed to both of the azimuthing thrusters. This gives the operator full maneuvering control of the tug while holding it in the best position for firefighting. The harbor tug becomes a serious asset for combatting waterfront fires. Emrah Sonmez, projects director of Uzmar, has said of the *Hermes*, “*We can confidently say that this project will be a real revolution in the towage operations.*” Delivery is anticipated for the summer of 2021. (Source: Alan Haig-Brown)



On December 19, 2019 a contract was signed with **UZMAR Shipyard** and **Smit Lamnalco Singapore Pte. Ltd** to purchase three new build 42mt ASD RStar 4200 Class Terminal / Escort Tug and one new build MPV 4600 Multipurpose Vessel. The new UZMAR-built Robert Allan-designed RStar 4200 Class Terminal / Escort Tugs are 42 meters in length, specially designed to meet the requirements of worldwide offshore operations for at least consecutive forty (40) days duration and shall be able to operate with a bollard pull of 95 tonnes (expected) and speed of 13 knots. The vessels will provide services for Coral South floating liquefied natural gas (FLNG) vessels in Mozambique starting from the 2nd quarter of

2022. RStar 4200 Class Terminal / Escort Tug designs are powered by ABC 12 DZC 2,900kW @ 1,000RPM main engines and Classified by Bureau Veritas for feature notations; I Hull, Mach, Tug, Fi-Fi 1 with waterspray, Oil Recovery-SECOND-LINE, AUT-UMS, Unrestricted Navigation, Cleanship, IWS, Green passport. GMDSS Navigation Area A3; Design: Robert Allan Ltd.; Main engine: ABC 12DZC 2,900kW @ 1,000RPM; Thruster: Kongsberg Azimuth Thruster US 35 CP, 3.0 meter Propeller dia.; Gen. set: Caterpillar C18, 410ekW @ 1,500RPM; Length: 42.00m.; Bollard pull: 95 Tonnes (expected); Winch: Kongsberg Brattvaag Bow Escort winch type SL150T-2T; Kongsberg Brattvaag Towing Winch aft type SL120-2 (One Vessel); FI-FI: MARSIS FI-FI 1 (2 x 1,200m<sup>3</sup>/h (water) / 300m<sup>3</sup>/h (foam) Monitors) The contract includes one MPV 4600 Multipurpose Vessel that has 46.20mt lengths and is designed by OSD IMT Ship Design & Marine Consultancy. The design has a speed of 13.5 knots. MPV 4600 is powered by ABC 12 DZC 2,900kW @ 1,000RPM main engines and Classified by Bureau Veritas for feature notations; I Hull, Mach, Aut-Ums, Tug, Fire Fighting I -Waterspraying, Oil Recovery ship – second line, Standby Rescue (60 survivors, Tropical Zone), Clean ship, Dynapos AM/AT R, Unrestricted navigation, Inwatersurvey, Green Passport, GMDSS Navigation Area A3. Design: OSD IMT Ship Design & Marine Consultancy; Main engine: ABC 12DZC 2,900kW @ 1,000RPM; Thruster: Kongsberg Azimuth Thruster US 35 CP, one 300kW PTI @ SB Thruster, 3.0 meter Propeller dia.; Gen Set: Caterpillar C18, 465ekW @ 1,500RPM; Length: 46.20m.; Bollard Pull: 95 tonnes (expected); Speed: 13.5 Knots; Winch: DMT Forward Escort Towing Winch Type 020H900kN; FI-FI: MARSIS FI-FI 1 (2 x 1,200m<sup>3</sup>/h (water) / 300m<sup>3</sup>/h (foam) Monitors). UZMAR Shipyard is known for building the highest standard vessels with an enhanced station-based serial production method at its modern facility established in Kocaeli, Turkey. UZMAR Shipyard increased its production capacity by 95% in 2020-21 with newly equipped expanded building areas. Smit Lamnalco operates a diverse fleet of Harbour & Terminal Tugs as well as Offshore Support Vessels. Smit Lamnalco Harbour & Terminal Tug fleet is fit for providing reliable marine services to Oil, Gas, and LNG terminals as well as port operations at 25 countries with 160 vessels.





# Marcon International, Inc.

## Tug Boat Market Report – May 2021



**Sanmar Shipyards** has signed six vessel contracts together totaling US\$33.46 million with the **Port Qasim Authority (PQA)** in Pakistan for four high performance state-of-the-art tugboats and two pilot boats. The tugs are scheduled to be delivered in 12 months and the pilot boats in 10. The contracts were awarded following a hard fought international tendering process during which Sanmar championed its new technologically-advanced Kocacay range of powerful and efficient escort and harbor tugs, based on the exclusive-to-Sanmar RAsar 3200SX design from Canada-based naval architects Robert Allan Ltd. The Sanmar Kocacay class tugs, designed in close co-operation with the Turkish tug builder and operator, and boast a unique sponsoned hull form, proven to provide significantly enhanced escort towing performance. Escort forces are enhanced by

the effects of the sponsons as well as by the prominent foil-shaped escort skeg. Three of the 32m x 13m x 5.6m high-powered LNG compatible tugs will have an impressive 75 tonnes of bollard pull ahead and astern, while the fourth will have an even greater BP of 85 tonnes. The first two tugs in the series, called “*Thor of Scapa*” and “*Odin of Scapa*” by their new owners, were delivered to the Orkney Islands Council in the UK last year. They are being used for ship-handling, towing, escort and emergency response duties and have been purposely designed with a shallower draught than most other tugs of similar size to ensure greater operational flexibility even with the depth limitations in some of the piers within Scapa Flow. The contracts with PQA for the ultra-modern tugs and two 20m pilot boats capable of 20 knots, were signed at a ceremony at the Ministry of Maritime office in Islamabad on 29 March 2021.

**Sanmar** is in the process of delivering three high-performance ultra-modern tugs in a row to different European operators working in Portugal, Italy and Estonia. All three are at sea and heading for their new homes. One Sanmar Terminal class tug is on its way to **MedTug SA** to operate out of the port of Sines, Portugal, while a second is being delivered to long-established Italian operator **Rimorchiatori Napoletani** in Naples. The third tug in this flurry of deliveries to European operators is the second of two new-build high-performance ice-breaking tugboats custom-designed for Finland-based operator **Alfons Håkans** by Canadian naval architects Robert Allan Ltd to operate all-year round in the northern Baltic Sea. It is due to arrive shortly at its new home in Muuga, Estonia. Known as *TundRA II* while under construction at Sanmar’s state-of-the-art Altinova Shipyard in Turkey, the tug has been named “*Helios*” by its new owner. Based on the TundRA 3200 design, “*Helios*” is powered by two Caterpillar 3516C main engines each driving a Kongsberg US 255 CP Z-drive, delivering a bollard pull in excess of 65 tonnes. The vessel’s electrical needs are provided by two Caterpillar C7.1 generator sets each of 118kW. Like its twin sister “*Selene*”, which was delivered to Alfons Håkans earlier this year, the tough and versatile “*Helios*” is capable of performing multiple, diverse tasks, including escort, ship assist, icebreaking and ice management, open sea towing, fire-fighting, small cargo transfer on deck including 20-foot containers, assistance in salvage, and oil spill recovery. Meanwhile, both Terminal class tugs, known as “*Terminal XXI*” and “*Terminal XXIX*” by Sanmar, are based on the RAsar 2800 design from Robert Allan Ltd and benefit from the new sponsoned hull form. Escort forces are enhanced by the effects of the sponson and the tug’s foil-shaped escort skegs.



Roll motions and accelerations are less than half those of comparable sized ‘standard’ tug hulls. The increasingly popular Terminal class tugs from Sanmar have achieved a well-earned reputation as highly maneuverable, efficient and tough operators, even in challenging sea conditions. Built in 2017 and previously part of Sanmar’s own fleet, “*Terminal XXI*” has been renamed “*Med Altair*” by MedTug. Measuring 28.2m LOA, with a moulded beam of 12.6m and navigational draft of 5.3m, “*Med Altair*” is powered by two MTU 16V4000M63 main engines each providing 2,000kW at 1,740 rev/min, driving Schottel SRP 1515 FP thrusters. The vessel can achieve a bollard pull of 75 tonnes and a speed ahead of 13 knots. The new-build “*Terminal XXIX*”, renamed “*Oriente*” by Rimorchiatori Napoletani, is the twin sister of the tug “*Baia*”, delivered to the Italian operator in May 2020, and is powered by two Caterpillar 3516 C HD main engines, each producing 2,525kW at 1,800 rev/min. It has Kongsberg US255 FP thrusters and 2,800mm diameter propellers, providing a speed ahead of 14 knots.



# Marcon International, Inc.

## Tug Boat Market Report – May 2021

**Sanmar Shipyards** is proud to announce the contract signing with **HaiSea Marine** for the build and delivery of two LNG Fuelled Escort Tugs and three Electric Battery Powered Harbour Tugs which will provide ship-assist and escort towing services to LNG carriers calling at LNG Canada's new export facility in Kitimat, British Columbia, Canada. Following an initial tender process which began in 2018, HaiSea Marine has awarded the contract for all five tugs to Sanmar plus an option for a 6th. The LNG tugs will be built in Sanmar Shipyards Altinova while the Electric Tugs will be built in Sanmar Shipyards Tuzla. The tugs have been designed by Vancouver-based Robert Allan Ltd. (RAL). The larger RAsar 4000 DF vessels will be the most powerful Azimuth Stern Drive (ASD) escort tugs on Canada's west coast, and will rank among the world's highest performing escort tugs. At 40 meters in length and with over 100 tonnes of bollard pull, they will generate indirect escort forces of approximately 200 tonnes. ASD tugs are equipped with two stern engines capable of generating a 360°, all directional propulsion force. The RAsar 4000 DF escort tugs will perform the majority of their missions using



natural gas as their primary fuel. This allows major emissions reductions compared to conventional diesel tugs of the same power, in compliance with the most stringent emissions standards in the international marine industry. In addition to these environmental benchmarks, the escort tugs will be capable of pollution response/oil spill recovery, firefighting of marine terminal fires, person overboard response, and emergency towage of vessels. At 28 meters in length, with approximately 70 tonnes bollard pull and 6,000kWh of battery capacity each, the first-of-class ElectRA 2800 battery-electric harbor tugs will perform all of their ship-berthing and unberthing missions on battery power alone. Bollard pull is primarily

used for measuring the strength of tugboats, with the largest commercial harbor tugs having around 60 to 65 tonnes-force. With ample clean hydroelectric power available in Kitimat, the harbor tugs will be able to recharge from dedicated shore charging facilities at their berths between jobs, effectively resulting in zero emissions.

**Sanmar** has delivered its first Tier III tugboat to **Buksér og Berging AS**, the first of two environmentally-friendly tugs ordered by the Norwegian operator. Built at Sanmar's purpose-built state of the art shipyard at Altinova in Turkey, the powerful, yet low emission tugboat has been named "*Bamse*" by its new owners. Based on the TRAKtor 3000-Z design from Canadian naval architects Robert Allan Ltd, the 30.45m LOA "*Bamse*" has a moulded beam of 12.8m and navigational draft of 6.35m. It was delivered at the end of May and will carry out escort duties from Brevik, in Norway. It is powered by two 2,200kW high speed engines driving CP propellers in an IMO Tier III emissions compliant installation. The state-of-the-art and technologically advanced design was developed by Robert Allan Ltd, Buksér og Berging and Sanmar Shipyards working closely together throughout every stage of the project. The design features a new hull form and accordingly significant design verification was performed using Computational Fluid Dynamics (CFD). Analyses included verification of ahead speed, astern speed, bollard pull, escort performance, and directional stability in order to help ensure the vessel will perform to the owner's requirements. The result is a vessel that perfectly matches the owner's performance, stability and seakeeping expectations. "*Bamse*" is the 6th tug delivered to Buksér og Berging by the busy Turkish builder and operator. In 2014 and 2015 Sanmar delivered five new-build tugs to the Norwegian operator, including "*Borgoy*" and "*Bokn*", the world's first two purely LNG-fueled tugboats. It was Sanmar's ability to offer ultra-modern, technologically-advanced and eco-friendly tugboats based on radical new CFD-tested designs, that led Buksér og Berging to once again choose the Turkish shipyard for its latest fleet upgrade. "*Bamse*" has an impressive bollard pull of 75 tonnes and is capable of generating a steering force in excess of 80 tonnes. It can achieve a speed ahead of 13 knots and has a fuel oil capacity of 126m<sup>3</sup>. As the tug will operate skag/stern first for the vast majority of time, visibility over the stern has been optimized and the stern of the hull is ice strengthened for operations in light ice conditions. Accommodation is designed for a crew of up to seven with Master and Chief Engineer cabins located on the main deck and a single and two double crew cabins below. Ali Gurun, Vice President of Sanmar, said: "*The TRAKtor 3000-Z tugs prove that minimizing environmental impact does not have to come at the price of reducing power or performance. Here at Sanmar we are proud to be at the forefront of the drive to develop increasingly environmentally-friendly tugboats through technological advance and innovation.*"



# Marcon International, Inc.

## Tug Boat Market Report – May 2021



Mid-January, the “SAAM Tarqui” arrived in Guayaquil to join the Ecuadorian fleet. Another tug is due to arrive in the second quarter. “SAAM Tarqui”, the new tug that will join **SAAM Towage's** fleet, arrived in Guayaquil. The vessel, which will provide service at Ecuadorian ports, set sail from Yalova, Turkey on December 14. Another tug is scheduled to arrive from Mexico in the second quarter of 2021. SAAM Towage's Country Manager in Ecuador, Juan Alfredo Illingworth, noted, *“Tarqui meets the safety standards for our operation in Ecuador. It also offers design features, like adequate power, shorter length, compact superstructure design and hull characteristics that make it optimal for operations in limited space, like those typical of transit and support operations in the Guayaquil area.”* Tug specifics: “SAAM Tarqui”, built by the Turkish shipyard Med Marine, has 1,800kW Wartsila 9L20 engines and Kongsberg US205FP azimuth thrusters, giving it certified a bollard pull of 70 tons. Its voyage included a logistics stop in Las Palmas de Gran Canaria (Spain). The vessel then crossed the ocean to Curaçao, went through the Panama Canal and continued its course to Guayaquil. A team provided by the Dutch company, Transport and Offshore Services (TOS), made the voyage and, after meeting all of Ecuador's COVID-19 protocols, turned the tug over to its new crew.

30m 60TBP ASD tugboat, “Svitzer Embla” has built and delivered by **Med Marine**, leading Turkish shipbuilder and operator, at its group owned **Ereğli Shipyard**. The vessel was successfully delivered in Ereğli Shipyard on March 29, 2021. First vessel of the series, “Eregli 84” was launched on November 20th, 2020. The vessel is a TundRA 3000 / MEDA3060-ICE class tugboat designed by Robert Allan Ltd. The tug will be operated by Svitzer A/S. She is set to be delivered to **Svitzer A/S** in April 2021. TundRA 3000 / MED-A3060-ICE design is made for tugs operating in extreme winter conditions, which makes it a great fit for Svitzer's North European fleet. High-quality and well-designed vessels have some distinctive features compared to other 20 different designs offered in Med Marine's tugboat portfolio. In this project for Svitzer, the winch is capable to operate over the stern as well via trunk running through the deckhouse. It is also located in an enclosed area to achieve perfect performance even in severe cold weather conditions. Once delivered, the vessels will operate across Scandinavia, predominantly serving ports in Denmark and Sweden. Leading global towage operator Svitzer Europe has announced that it has taken delivery of the first of two new specially designed icebreaking tugs from Med Marine to support its operations in Scandinavia. After mobilizing from the Ereğli Shipyard, “Svitzer Embla” will arrive and start working in Sweden in the beginning of April 2021. Soon after, in the beginning of May 2021, the second tug – “Svitzer Edda” - will be delivered and start mobilizing towards Denmark, where she will serve a large variety of customers throughout Scandinavia. Both ice class tugs will strengthen the level of service that Svitzer provides to customers in Scandinavia and further reinforce Svitzer's presence in the region. TundRA 3000 / MED-A3060ICE design has following design particulars: Length overall: 30m; Beam of Hull: 12.6m; Extreme beam (including fenders): 13.2m; Depth moulded: 5.7m; Maximum draft: 5.6m; Gross tonnage: <500GT; Minimum bollard pull: 60 ton; Power: Approx. 3,900kW.



**Med Marine** proudly announces the delivery to Spanish tug operator **Remolques Gijoneses** for a MED-A2575 series tug. The announced contract was remotely signed by both parties on the 27th of October, 2020. MED-A2575 series is a Robert Allan's RAMPARTS 2500W design, which is an ASD design offering different bollard pull options. MED-2575 series are known as versatile and robust ASD tug designs for ship-handling, coastal towing, general purpose or escort duties. MED-A2575 is one of the most preferred series in Med Marine's portfolio. The company successfully built and delivered eight units of this series with different bollard pulls (60TBP, 70TBP, 75TBP). The delivery has completed in Apr. 2021, MED-A2575 model tug (Hull Name: “Eregli 78”) will be operated for the company's Gijón operations. The tugboat's specifications include: Length o.a.: 25.20m; Beam: 12m;

Depth: 4.60m; Bollard pull: 70 tons; Speed: 12 knots; Main engine: 2 x CAT 3516C 2,100kW @ 1,600RPM; Thruster Kongsberg (Rolls Royce): US255SP30 FP; Fore towing winch: THR Marine (SEC); Generator set: 2 x CAT C4.4 99ekW @ 1,500RPM, 50hz; Fifi system: 1 x 1,400m<sup>3</sup>/hr. Pump, 2 x Foam/water monitor; Accommodation: 7 people.



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**Med Marine** delivered 30m and 55TBP MED-A3055-ICE-SUPER class ASD tugboat, *Sulina 2* to **AFDJ**, Romania. (Administratia Fluviala a Dunarii de Jos RA Galati, a state organization of Ministry of Transport in Romania.) MED-A3055-ICE-SUPER class tugboat is specially built by Med Marine / Eregli Shipyard engineers according to AFDJ's operational requirements being mainly in Danube. As part of this, the tug is prepared for IMO Tier III regulations and BV Ice Class 1A Super notation. "*Sulina 2*" will commence its operations in Danube River. The tug is fitted with twin Caterpillar 3512C diesels each delivering 1,902kW, coupled to Schottel SRP460FP fixed pitch ASD units, THR Marine forward and aft winches. The tug built by Med Marine Turkey, "*Sulina 2*" will patrol on the Danube sector, between Braila (km 175) and Sulina Bar and will contribute to the improvement of the safety and of the security of the maritime ships traffic, through the following activities: She will insure the flowing of the ice pieces, for avoiding formation of ice bridges, which is very dangerous for the ships and could lead to the hydrotechnical constructions. She will intervene to release the ships from the ice, for avoiding the risk of their sinking, which could lead to loss of the human lives, goods and present a real pollution danger of the Danube with fuel oil or with their cargo; will intervene for helping the ships landed on sand banks on the river; firefighting to the other ships and on shore; and assistance and intervention to the ships in the port or anchoring area. Muhammet Gokhan, Business Development Manager of Med Marine said: *"We are happy to have completed the high quality tugboat and successfully delivered 'Sulina 2' to AFDJ to their satisfaction and appreciate their trust in Med Marine especially during these difficult times affecting all sectors on a global scale. I believe this will constitute a long term relationship between AFDJ and Med Marine."* Length overall: 30.00m; Extreme beam (including fenders): 10.50m; Depth moulded: 4.85m; Gross tonnage: <375GT.



**Med Marine** delivered a new series tug MED-A3280-SD (shallow draft) tugboat to **National Coal Supply Corporation (NCSC)**'s fleet operating in Hadera. NCSC is a state company that handles the procurement and transportation of coal in Israel. Named after the port she will be operating, HADERA was successfully delivered to NCSC around the middle of December 2020. MED-A3280-SD model tug which belongs to Robert Allan's RAmports 3200-SD design is the shallow draft adaptation of RAmports 3200 series that are well-known for their versatile/multipurpose nature and

enhanced ship-handling, coastal towing, escort, general purpose duties. RAmports 3200 is one of the most widely accepted design in the industry with more than 400 of this series in worldwide service today. Med Marine has successfully built and delivered more than two dozen tugboats with this design. Yet, HADERA is the first RAmports 3200-SD vessel with shallow draft. Being a shallow draft tug, it is quite easy for her to operate in shallow and difficult waters such as rivers etc. Eylül Turhan, Business Development Chief from Med Marine, expressed her feelings about this delivery & said: "It is an excitement and a great pleasure for us to work with The National Coal Supply Corporation for our former but shallow water adapted design. Thanks to Robert Allan Ltd's expertise, we were able to build this lower draft MED-A3280-SD series tug with full performance capabilities. Besides limited draft requirement, NCSC's request for noise levels even lower than IMO regulations enabled us to improve ourselves further. We are happy to serve our customers with our experience and proven designs with tailor made revisions" NCSC also commented on this successful delivery with following words: "NCSC as Owners, and The Port of Hadera as operators of the vessel, are most grateful for the final result that manifested itself in our new built tug "Hadera", which was constructed in the Med Marine's yard in Eregli. It is a result of close and determined co- operation between the companies, in the most difficult of times. " The tugboat's specifications include: Length overall: 31,50 m; Beam: 12,60 m; Draft: 4,87 m; Bollard Pull: 75 tpb; Speed: 12,5 kts.; main engine: 2 x CAT 3516C, 2 x .2.350 Kw @ 1.800 rpm; Propeller: 2x SCHOTTEL SRP 460 CP with 2.700 mm diameter; Fore Towing winch: THR MARINE EATW 22 U3 - 300 kN; Decl crane: Toimil T-10500M/2 SWL10,5t.m reach 8 m; Generator set: 2 x CATERPILLAR C4.4 99ekW; Fifi 1 system: 2 x 1.375 m3/hr pump, 2 x foam/water monitor, water spray system; Accommodation: 8 persons.

On Dec. 22nd, 2020, two units of 2,942kW ASD tugboats with FIFI, which are built for **Zhoushan** and named "*Zhou Gang Tuo 37*" and "*Zhou Gang Tuo 38*". Completed, have completed and delivered by yard **Jiangsu Zhenjiang Shipyard**. The ship has a total length of 39.925m, a width of 10.4m, a depth of 4.5m, bollard pull (stern) of 51.9mt, bollard pull (forward) of 46.5mt, an endurance of 1000nm and a speed of 13.10kn.





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## Tug Boat Market Report – May 2021



On March 5th 2021, two units of 3,676kW ASD tugboat with FIFI, which was built for domestic owner, have been delivered successfully at the **Jiangsu Zhenjiang Shipyard**. The vessel has a length of 36.5m, a breadth of 10.4m, and a depth of 4.8m, bollard pull (ahead) of 62.5mt, bollard pull (astern) of 56.7mt, endurance of 1,000nm and speed of 14.3kn.

On 29th of May, 2021, two units of 5,000PS ASD Tugboat with water supply, named “Yong Gang Tuo 32” and “Yong Gang Tuo 33” which were designed and built for **Ningbo Yonggang Tugboat Co., Ltd** were successfully completed and delivered by **Jiangsu Zhenjiang Shipyards**. The general particulars of this type of tugboats are as below: Loa: 39m, B.M.: 10.6m, D.M.: 4.9m, Ahead B.P.: 64mt, Astern B.P.: 57.4mt, Endurance ≥ 1,200nm, Speed: 13.2Kn. Four fresh water filling tanks are located on bow and stern as well, it can be used for external water supply of 85m3.



On 31st of May, 2021, one 2 × 1,912kW ASD Tugboat with FiFi-1 named “Nan Gang Tuo 9” which is designed and built for **Tianjin South Port Co., Ltd** have been delivered successfully by **Jiangsu Zhenjiang Shipyard**. The vessels have overall length of 38m, breadth of 10.6m, depth of 4.85m, ahead Bollard Pull of 63.2mt, astern Bollard Pull of 57.5mt, endurance of 1,000nm and the speed ≥ 13.4Kn.

**Damen Shipyards Group** has signed a contract for a Shoalbuster 2711 – the second vessel of its kind ever to be built. The award of contract comes following a tender procedure. The new vessel will be the second Damen vessel to be operated by the **Ports of Jersey**, which has operated a Damen Shoalbuster 2709, named “*Duke of Normandy*”, for the past fifteen years. Ports of Jersey was looking for a vessel offering versatility. As Donford Nicholas, operations and commercial manager, explains. *“Since our incorporation, Ports of Jersey Marine Services department has developed a presence in the commercial maritime world, while still undertaking regular maintenance work in local waters. With an expanding work scope, we needed a vessel with increased capability. We were looking for something that could support a wide range of tasks, including engineering and survey projects. We have a keen focus on sustainability so it is our goal to support the forthcoming offshore wind projects that will take place in UK and EU waters nearby. We see this vessel as added value, not only for the Ports of Jersey, but for the community as a whole, offering a greater potential of commercial opportunities and, ultimately, wider employment prospects.”* Ports of Jersey selected the Damen Shoalbuster 2711 after visiting the first of its kind on display at the Seawork exhibition in Southampton. The Shoalbuster 2711 is an evolved version of the 2709. An additional two meters of beam provide extra stability, work space, storage and space for a larger crane. It is MCA compliant, offers 40 tonnes bollard pull and boasts excellent crew facilities. As with all standard Damen vessels, there is room for the customer to select their own options to suit their individual requirements. *“We’ve opted to have the vessel fitted with the latest Heila crane,”* says Donford. *“We’ve got a good relationship with Heila. They provided the crane to the ‘Duke of Normandy’ and everyone is familiar – and happy – with it.”* The “*Duke of Normandy*” played an important role in Damen’s success in securing the contract for the new vessel. *“We’ve been very happy with the performance of the ‘Duke of Normandy’. She’s proven her quality over 15 years. The price for the new vessel was also competitive. Besides this, we enjoy a good relationship with Damen.”* This was demonstrated just last year when Damen Shipyards Gorinchem won the tender to conduct the “*Duke of Normandy’s*” 15-year drydock and renewal survey. No sooner had the vessel docked than the coronavirus outbreak occurred. All the crew had to leave the Netherlands and return to Jersey. Damen sales manager Frederik van der Linde said of the contract, *“I’m very happy with this order. It’s a testimony to the quality of the Ports of Jersey’s first Damen Shoalbuster, the ‘Duke of Normandy’, that we delivered 15 years ago and to the excellent relationship our two organizations enjoy. I am looking forward to continuing to develop this relationship into the future.”* The Shoalbuster will be outfitted in the Netherlands by Damen Shipyards Hardinxveld and will be delivered to Ports of Jersey in Q4 this year.



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**Damen Shipyards Group** has delivered two RSD Tugs 2513 to France-based **Thomas Services Maritimes** (TSM). The client was looking for the latest in tug technology and will operate the vessels on the River Seine in the port between the Ports of Rouen and Honfleur (HAROPA – Port de Rouen). The tugs will assist bulk cargo carriers, facilitating the export of cereals from the Port of Rouen – Europe’s number one grain terminal, tankers and all vessels inbound for Rouen. Like Damen, TSM is a family company; something which played a part in Damen’s securing of the order, as Mr Loïc Thomas, CEO at the company explained, “We were looking for new tugs with the latest in vessel

technology and we heard about Damen’s quality and reliability. We found that Damen shared our values as a family business, taking a long-term view that extends well beyond the straightforward delivery of new vessels. Damen provided us with a solution that perfectly met our needs, including environmental requirements we consider for our investments.” A part of this was adapting the standard, proven design of the RSD Tug 2513, lowering the vessels’ draft to ensure their suitability for sailing in the relatively shallow waters of the River Seine. Despite the modifications the tugs retain their over 80 tonnes bollard pull when towing – as demonstrated during seatrials. The RSD Tug 2513, part of Damen’s Next Generation series, aims at delivering exceptional levels of safety, sustainability, efficiency and reliability. As part of this, the tugs are prepared for IMO Tier III regulations, as Damen sales manager Joost van der Weiden explains, “At Damen we are on a mission to become the world’s most sustainable shipbuilder. The RSD Tug 2513 plays an important part in this. For example, the tugs are thoroughly prepared for IMO Tier III. Compliance can be achieved with the quick, simple, plug and play installation of the Damen Marine NOX Reduction System. This selective catalytic reduction technology delivers reduced NOX emissions of 70% compared to IMO Tier II. In this manner, TSM’s new vessels are suited not only to their operations today, but also for the future.” The tugs are named “TSM Honfleur” and “TSM Rouen”.



On 13th March, **Damen Shipyards Group** signed a contract with **South Port New Zealand** for the delivery of a Damen Azimuth Tractor Tug (ATD) 2412. The vessel, with 65 tonnes bollard pull, will replace an older vessel with 35 tonnes bollard pull. This will bring the port’s total bollard pull capability up to 105 tonnes, increasing safety margins in the handling of large vessels. South Port has selected an ATD due to its ability to undertake indirect towage and for the vessel’s excellent maneuverability and power. Due to Damen’s practice of building standardized vessels in series and for stock, the ATD Tug 2412 was already being built at Damen Song Cam Shipyard in

Vietnam at the time of contract signing. The yard will complete construction and deliver the vessel in Q3 this year. South Port, based in New Zealand’s Southland, is the southernmost port in the country.

**Damen Shipyards Group** has been awarded a contract by Australia-based **Engage Marine** for the delivery of three ASD Tug 3212. The tug is one of Damen’s Next Generations Tugs Series. The vessels in the series combine proven technologies with cutting edge innovation to take an evolutionary step forwards in terms of safety, sustainability, reliability and efficiency. Engage Marine will operate the three tugs to provide towage services for the Port of Abbot Point. The company has recently been awarded a Non-Exclusive Towage License by North Queensland Bulk Ports Corporation. The ASD Tug 3212 will bring to the contract excellent seakeeping behavior, superb maneuverability and outstanding towing characteristics – with 85 tonnes bollard pull.

As a vessel from Damen’s standardized portfolio, the shipbuilder constructs the ASD Tug 3212 for stock in order to facilitate rapid delivery. As a result, Damen will deliver the three tugs to Engage Marine in Q3 this year. Engage Marine Chief Executive Officer, Mark Malone, said “we selected Damen as they are a world class tug builder and the ASD 3212 vessels are a proven design, well suited to the prevailing conditions of this operation. Damen’s ability to deliver on time, high quality assets with dedicated support during the build, delivery process and locally, once in operation, give us confidence in reliability from the start. The design promotes crew comfort, operational capability and energy efficiencies, all high on Engage Marine’s list of providing sustainable towage services. A modular approach to IMO tier III NOx requirements also means we can deliver on environmental commitments well into the future.”





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On 4<sup>th</sup> December at Song Cam Shipyard in Vietnam, the world's first fully-electric ship-handling tug of 70 tonnes bollard pull – the Damen RSD-E Tug 2513 – was launched into the water. **Damen** is building the vessel to support its customer, New Zealand's **Ports of Auckland**, in achieving its ambitious sustainability targets. The RSD-E Tug 2513 takes an already efficient design and optimizes it for maximum maritime sustainability. Ports of Auckland has the goal of being a zero emissions organization by 2040. With this in mind, the organization approached Damen with the question – was a fully-electric, zero emissions tug a possibility? Damen, with its own goal to become the world's

most sustainable shipbuilder, was keen to take up the challenge. With Ports of Auckland already operating a Damen ASD Tug 2411, the shipbuilder was able to assess the potential for a fully-electric tug. The idea proved not only to be possible, but economically viable. Sjoerd de Bruin, Damen sales manager Asia Pacific, said *“With 40% of New Zealand's energy being generated from sustainable sources – including 80% of electricity – ‘Sparky’ offers the chance to complete the sustainable circle in Ports of Auckland's tug operation. Since receiving the order for this historic vessel, we have been working towards this moment – the introduction of the first fully-electric tug of this capability to the water. We are looking forward to continuing in our task and completing the vessel in the coming months.”* The next stages of construction will see Damen install the vessel's innovative hardware. The RSD-E Tug 2513 is scheduled to be delivered to Ports of Auckland end 2021. Following a vote, Ports of Auckland planning to name the vessel *“Sparky”*.

**Neptune Marine** has strengthened its long-lasting relationship with Verbeke Shipping with an order from Belgium-based **Verbeke Shipping** for the design and construction of a new multi-purpose tugboat, the EuroTractorTug 2410. The vessel will be entirely built in the Netherlands. Delivery is scheduled for mid-2021. The EuroTractorTug 2410 is based on the proven EuroTug design. To design a vessel that complies with Verbeke's requirements and Belgian flag state, Neptune Marine has developed a multi-purpose tug in close collaboration with the operator. To create excellent maneuvering capabilities, the vessel uses Voith propellers. Verbeke Shipping and Neptune Marine share a common goal to develop innovative and sustainable products and services. As a result, the newbuild tug is equipped with powerful IMO Tier 3 engines. The use of those cleaner engines reduces emissions of the EuroTractorTug significantly, whilst offering reliable performance. In addition, the vessel will be outfitted with a compact deck crane, anchor handling winch and an A-frame with dredging plough. In July the keel-laying ceremony took place at the shipyard in Aalst, the Netherlands. The EuroTractorTug will be constructed at its location in the Netherlands in close collaboration with its subcontractors, which whom it holds long-term relationships.



The *“WillChallenge”* is a **Neptune Marine** built Eurocarrier 2209. The vessel is managed by **Williams Shipping**. The vessel is 22m long, 9m wide and the draft is approximately 2m. The vessel has been designed to perform a wide variety of tasks. The *“WillChallenge”* could be used for a wide range of marine operations, such as supplying fuel and water, transport of equipment on deck or in ISO containers, survey and research jobs, general towing jobs, etc. The complete vessel, including the hull, has been built in the Netherlands under Neptune Marine own supervision. Both the assembly of the hull and outfitting has been done at the yard in Aalst. The *“WillChallenge”* has two Caterpillar C18 main engines, which have 447kW at 1,800RPM each. The engines drive

two 1,350mm propellers through Twin Disc gearboxes. During the bollard pull the vessel reached a 14,8 tonne bollard pull and a speed of 11 knots. For electric power the vessel is equipped with two Caterpillar C4.4 generator sets. Hydraulic power onboard is provided by two 55kW electric motors, driven by both generators. A Heila 140-4S deck crane is fitted on PS at the bow, also a 50 tonne split drum anchor handling and towing winch and a 10 tonne tuggerwinch are fitted. In the bow a wide bow roller is fitted in combination with hydraulically operated wire-guide pins. The inside space has been divided in the most optimal way possible. There are three properly sized cabins and a bathroom and shower below deck. There is accommodation for six crew members onboard. At main deck level the messroom is located. The wheelhouse provides good space for the crew, but also space for survey equipment. The wheelhouse provides an excellent view around the complete vessel. The *“WillChallenge”* is classed Bureau Veritas, Special service / multipurpose ship, unrestricted navigation.



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**Neptune Marine** has delivered a EuroCarrier 2409 named “*Jif Mairi*”. The vessel is managed by **North West Marine**. The vessel is 24m long, 9m wide and the draft is approximately 2m. The robust, efficient and flexible design of the EuroCarrier makes it one of the best vessels for anchor handling, dredging support and survey activities. The “*Jif Mairi*” is a re-designed Eurocarrier 2209. This re-design was done especially for North West Marine, so that the vessel is best suited for their activities. The original multi functionality of the vessel is maintained, so that the vessel can still be used for a wide range of marine operations, such as supplying fuel and water, transport of equipment on deck or in ISO containers, survey and research jobs, general towing jobs, etc. The complete vessel, including the hull, has been built in the Netherlands under Neptune Shipyard’s own supervision. Both the assembly of the hull and outfitting has been done at the yard in Aalst. The vessels re-design was done to make the vessel more suited for North West Marine’s fish farm activities. Special attention was given to the work deck. The vessel has been equipped with wooden, removable, bow doors. A ladder has been integrated into the vessels SB side. The SB side fendering has been upgraded to rubber D fendering on both front and aft SB side, at SB center flush plastic fendering was installed. The “*Jif Mairi*” has two Caterpillar C18 main engines, which have 447kW at 1,800RPM each. The engines drive two 1,350mm propellers through Twin Disc gearboxes. During the bollard pull the vessel reached a 14.7 tonne bollard pull and a speed of approximately 10 knots. For electric power the vessel is equipped with a Caterpillar C4.4 generator set and a Caterpillar C7.1 generator set. Hydraulic power onboard is provided by two 55kW electric motors, each driven by a generator set. A Heila HLRM 140-4S deck crane is fitted on SB at the bow, also a 50 tonne anchor handling and towing winch and a 10 tonne tugger winch are fitted. In the bow a wide bow roller is fitted. In the re-design a HLRM 25-4S crane was fitted SB aft. The below main deck accommodation space has been divided in the most optimal way possible. There are three properly sized cabins, a bathroom and a separate toilet below main deck. Also, a large store area is provided below main deck. The vessel is certified for a maximum of six crew members onboard. At main deck level the messroom is located and in addition to the standard design the vessel has a changeroom that provides access from main deck to both the messroom and the engine room. The wheelhouse provides a good working space for the crew, with a small seating area and a proper working desk but also space for survey equipment. The wheelhouse is fitted with large windows to provide an excellent view around the complete vessel. The “*Jif Mairi*” is classed Bureau Veritas, Special service / multipurpose ship, unrestricted navigation.



**Robert Allan Ltd.** is pleased to announce that TRAktor 2800-Z tugs “*Svitzer Abrolhos*” and “*Svitzer Wilu*” were successfully delivered to **Svitzer Australia** in January and March 2021, respectively. The two vessels will enter service at Geraldton Port, Western Australia, joining the “*Svitzer North*”, a Robert Allan Ltd. designed RAstar 3000-W tug which was delivered at the end of 2020. All three tugs were constructed at **ASL Shipyard Pte. Ltd.**, Singapore. These z-drive powered tugs were designed to operate both ahead and astern with superior maneuverability. They have excellent stability for escort operations using the winch on the aft deck. They also maintain good sea keeping performance for coasting towing and free-run operations with ahead navigation. As per the owner, these tugs are some of the most powerful tractor tugs in their Australian fleet. The new tugs will provide increased capability during heightened weather conditions and during emergency events.

“*Svitzer Abrolhos*” was named in honor of the local, historically significant, island jewels off the coast of Geraldton. The Abrolhos Islands hold countless stories of shipwrecks, mutiny, and maritime history, and play an ongoing role in the region’s aquaculture and tourism industries. “*Wilu*” in “*Svitzer Wilu*” is the Yamaji word for sea, seaside or saltwater, reflecting the critical role the Yamaji people play in the Mid-West region. Key particulars of the vessels are: Length, overall (excluding fenders): 28.4m; Beam, moulded: 12.80m; Depth, least moulded: 4.68m; Maximum draft (navigational): 5.71m; Gross Tonnage: 443. The tugs were designed and constructed to the following Lloyds Notation:  $\star$ 100A1, Escort Tug, Fire Fighting Ship 1 with water spray,  $\star$  LMC, UMS, \*IWS, Unrestricted Navigation. The accommodations have been outfitted to a high standard for a crew of eight. The deckhouse contains an entrance lobby, the galley, mess, two officer cabins with ensuite WC, HVAC room and a change room with laundry and WC. The lower deck contains three double berth cabins each with an ensuite WC. The wheelhouse is designed with a single split control station which provides maximum all round visibility and exceptional visibility to the bow and side fendering. The engine room features an acoustically isolated switchboard room. Trial results were as follows: Bollard pull, ahead: Both “*Svitzer Albrolhos*” and “*Svitzer Wilu*” reached beyond the designed bollard pull of 70 tonnes; Free running speed, ahead: 12.8kn.



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**Robert Allan Ltd.** has decades of experience in designing ice-capable vessels including tugs. The TundRA series was developed as a compact icebreaker capable of continually breaking ice with a thickness of up to 11.2m at a speed up to 3 knots. The hull structure is designed to meet Finnish Swedish (FS) Ice Class Rules to ensure safety during icebreaking operations. Each TundRA is also customized to meet the end-user requirements. Although the emphasis of the design is based on ice-class requirements these tugs are a multi-functional tool, combining good open water performance with effective icebreaking capability as well as being capable of providing significant escort performance. Typical tasks for a TundRA tug include ice breaking and ice management, channel clearing,

ship assist in ice as well as escort service, coastal towing, navigation aids service, firefighting service, limited cargo transfer and other capabilities in extreme climate conditions. The wheelhouse and deckhouse are designed for optimum all-round visibility. These tugs break ice with their acceleration, weight, hull shape and power. The well proven spoon-shape bow, and round bilge hull form is developed based on extensive model testing. This hull shape merges into a modern ship-docking style bow, providing low fender contact pressures for ship handling duties. Ice-knives are added under the stern to prevent large blocks of ice hitting the propulsion units when going astern or turning around in the channel. The hull shape combined with dual z-drive configuration allows for dynamic clearing of a channel to a width of twice the tugs beam. Some of the additional design features include the covered winch on the foredeck and heated working-decks and other winterization elements. The propulsion options vary between a single screw, open wheel TundRA 1900 to z-drives with controllable pitch propellers in nozzles as on TundRA 3600. Bollard pull performance vary between 6 and 100mt respectively. The design is optimized for the most onerous ice performance criteria. This results in slightly less efficient open water performance, but this can be minimized by using the modern diesel mechanical-electrical hybrid power configuration designed to match the intended operational profile. The hybrid configuration results in a significant reduction in carbon emission as well as flexibility in the operational modes. This, in turn, leads to less maintenance cost, fuel savings and minimal environmental impact.

**Robert Allan Ltd.** is pleased to announce that **Shanghai Harbour Fuxing Shipping Service Company Sanlin Shipyard** has successfully completed the 3,680kW RAmports 3200-W tug “*Hai Gang 501*” which will provide service at Shanghai Port. This will be the first Robert Allan Ltd. tug to operate in China’s busiest port which has also been the world’s busiest container port for the last decade. As part of the RAmports series, this new tugboat is designed for berthing and unberthing large vessels in harbor and is also capable of coastal towing services due to its exceptional sea keeping performance. This design was altered slightly to suit the selected machinery and equipment and the accommodation arrangement that the crews are familiar with. The entire tug fleet owned by Shanghai Harbour Fuxing Shipping Company are named “*Hai Gang*” which translates as “*harbor*” in the Chinese language. Sanlin Shipyard had built more than ten Robert Allan Ltd. designed tugs for its domestic and international clients before building *Hai Gang 501* for its mother company. The vessel’s accommodations are outfitted to MLC compliant standards for a crew of up to ten personnel. There are six single cabins and two of 2-crew cabins arranged in the deckhouse and lower accommodation deck. Main propulsion for the tug comprises a pair of Niigata 6L28HX main engines, each rated at 1,840kW at 750RPM, driving a cardan shaft system to a Niigata ZP-41A Z Peller propulsion unit with a 2,600mm diameter fixed pitch propeller. Ship handling fenders at the bow consists of an upper 800 x 400mm cylindrical fender with a lower course of W type fender. A 300 x 300 hollow “D” fender provides protection at the main deck sheer line and along the knuckle, and W type fender is used at the stern. The deck machinery comprises a Karmoy hawser winch on the bow, spooled with 250m line on each drum. With twin anchor windlass at bow beside hawser winch and a Karmoy towing winch provided on aft deck. The tug was designed and constructed to the following CCS Notation: ★CSAD, Tug/Fire Fighting Class 1; Coastal Area; ★CSMD, IBS. Other particulars of the “*Hai Gang 501*” are: Length, overall (excluding fenders): 32.0m; Beam, moulded: 12.0m; Depth, least moulded: 5.42m; Maximum draft (navigational): 5.29m; Gross Tonnage: 498; Main tank capacities at 100% are: Fuel oil: 190m<sup>3</sup>; Potable water: 31m<sup>3</sup>; Ballast: 86m<sup>3</sup>; Fire-fighting foam: 7m<sup>3</sup>; Trial results were as follows: Bollard pull, ahead: 68.2mt; Free running speed, ahead: 13.3 Knots.





# Marcon International, Inc.

## Tug Boat Market Report – May 2021



Leading global towage provider **Svitzer** announced May 20, 2021 that it has signed a contract with Brazilian shipyard **Rio Maguari** for the delivery of four new azimuth stern drive (ASD) 70-ton bollard pull tugboats for its operations in Brazil. Svitzer Brazil has since its entry in 2015 deployed 14 ASD tugs to service its customers in the ports of Santos, Vitoria, Rio Grande, Sao Francisco do Sul and Paranagua, and this will be the fourth time that the company orders new tugs to be built in Brazil. The four newbuilds are an important addition to the existing fleet and a vital element in Svitzer Brazil's growth ambitions. The four new tugs will be from the RAmports 2300 series designed by Robert Allan Ltd. The first of the four new tugs will be delivered in October 2022, while the last of the four tugs will follow in April 2023.

On Wednesday, December 16, 2020 The **Great Lakes Towing Company** and Great Lakes Shipyard's employees joined together at the Company's Cleveland facilities to celebrate the christening of the new tugs "**Pennsylvania**" and "**Wisconsin**". The Tug "**Pennsylvania**" was christened by vessel sponsor, Louise Kandzer, girlfriend of Gregg Thauvette, the Company's Senior Vice President Operations; and the Tug "**Wisconsin**" was christened by vessel sponsor, Sally Stevens, wife of Robert Zadkovich, Vice President-Business Development. The newly constructed Tugs "**Pennsylvania**" and "**Wisconsin**" are the fourth and fifth tugs, respectively, in a series of ten 64-foot Damen 1907 ICE design harbor tugs that Great Lakes Shipyard is building for The Great Lakes Towing Company's operations. The tugs are 64' x 24' x 11', powered by two 1,000HP MTU 8V4000 Tier III diesel engines, and generate over 30-tons of bollard pull. Their propulsion systems include the Canal Marine designed Logan FlexaDrive Hybrid power system, allowing the tugs to operate on electric power while at idle, underway at low speeds, or when under low loads, without the need to utilize the main engines, thereby reducing emissions and the cost of engine maintenance. The tugs' compact size and high maneuverability make them ideal for the narrow waterways and low bridges that characterize harbor towing on the Great Lakes. The sixth tug, not yet named, is slated for a Summer 2021 completion.



The company **Société Coopérative des Lamaneurs of Brest and Roscoff** harbours entrusts the **PIRIOU** group with the building of a harbor tug. Her delivery is scheduled in August 2021. Built by **PIRIOU VIETNAM** with a sea proven **PIRIOU** design, her design was adapted to answer the specific requirements of the shipowner. Dedicated to harbor towing operations from the rear or alongside, pushing operations and deep-sea towing from the rear. In terms of crew comfort, the vessel has cabins at main deck and complies with the MLC 2006 rules. This 16.5m and 15mt bollard pull tug will be equipped with a new generation motorization compliant with the IMO III

regulation and will have home port in Concarneau. Main characteristics: Length: 16.50m; Breadth: 6.56m; Depth at main deck: 2.55m; Max draught: 2.50m; Bollard pull: 15mt; Fuel oil capacity: 15.0m<sup>3</sup>; Fresh water: 1.6m<sup>3</sup>; Propulsion: 2 x 440kW; Crew: 4 persons; one bow thruster; Hull / superstructure: steel.

Modern day naval architects are accustomed to accommodating a number of design parameters. Tullio Celano, of **Crescere Marine**, recently took on an unusually set of design specs for a new tug. The **US Army Corps of Engineers** wanted a little 26-foot tug to handle the bulkhead stoplog at the Little Goose Dam. The dam, on the Snake River in the State of Washington, is a run of the river electrical facility and the stoplog is required to keep floating objects from entering the penstocks. The little tug would have an operating draft of only five feet. It was also required to have an elevated height of eye for the operator. It would have to be able to be legally transported on state highways by truck, so the beam was limited to 13.5 feet. This is a tug, and it will be doing a tug's work. As such, the vessel is designed for a bollard pull of 11,000 pounds. To achieve this, the 602BHP tug is powered by a pair of 301BHP Cummins 6.7 QSB keel cooled engines. Each engine turns an open, 4-blade, 32 by 20-inch, Workhorse propeller through a ZF 325-I gear with 2.957:1 reduction. The tug is fitted with tankage for 350 US gallons of fuel. It complies with 2020 ABS Marine Vessel Rules for structures, and the USCG CFR rules for towing stability at full power. Launch and sea trials were carried out at the builder, Willie and Carol Toristoja's **WCT Marine's** Tongue Point facility. A launch ramp for the former Tongue Point seaplane base on the Columbia River near the Port of Astoria, Oregon was utilized for the launch at the end of January 2021. (Source: Alan Haig-Brown)





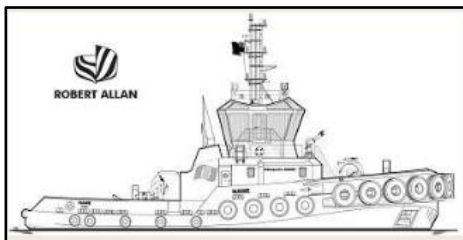
# Marcon International, Inc.

## Tug Boat Market Report – May 2021



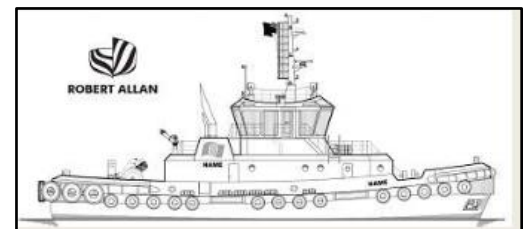
**Crowley Solutions** has been awarded the five-year contract to deliver military specification fuel to the Eareckson Air Station located on the remote Aleutian Island of Shemya, Alaska. Under the **U.S. Defense Logistics Agency-Energy** contract, beginning in 2021, Crowley will provide lightering and transportation of 4 million gallons of fuel annually for the radar and aircraft refueling station and its 180 military, contractors and

civilians who operate it. Crowley has consistently transported and delivered the fuel since 1956 to the base 1,200 miles from Anchorage in the remote western reaches of the Aleutian Island archipelago. The U.S. government has counted on the company's experience and innovative logistics capabilities in remote and austere environments, including a unique over-the-shore evolution successfully developed and executed by Crowley in 2020. However, under the new contract term, Crowley will provide transformational improvements and cost efficiencies through the utilization of the company's new, purpose-built articulated tug-barge (ATB) in a joint service by Solutions and Crowley Fuels, the company's Alaska-based fuel transportation and distribution business unit. The 55,000-barrel-capacity (2.3 million gallon) ATB "Aurora" / "Qamun" will serve the air station and Crowley's customers throughout western Alaska and the Arctic. The 410-foot ATB is specifically designed to meet Ice Class and Polar Code requirements in order to safely and effectively operate in Western Alaska year-round. *"Crowley's record of dependability and high performance will add a new chapter under this contract when 'Aurora' / 'Qamun' enters service to the government and military,"* said Sean Thomas, vice president, for Crowley Solutions. *"It is an honor to continue serving our warfighters by safely providing value through a resilient and dependable supply chain whenever and wherever they need fuel."* *"We appreciate the confidence the government continues to show in Crowley. The new contract award reflects the proficiency and skill of the dedicated men and women of Crowley Fuels, and the strong collaboration by the Fuels and Solutions teams,"* said Rick Meidel, vice president and general manager, Crowley Fuels. The ATB, which was designed by Crowley Engineering Services powered by subsidiary Jensen Maritime, is undergoing its final outfitting prior to entering service this year. The tug is being constructed by **Master Boat Builders** of Bayou La Batre, Ala. The barge is being built by **Gunderson Marine** LLC, a wholly owned subsidiary of the Greenbrier Companies, Inc., in Portland, Ore.



**PT. Graha Trisaka Industri**, has awarded tug design contracts to **Robert Allan Ltd.** for a RAMParts 3200-W and a TRAKtor 3200-V. The tugs will be built and operated by **Taiwan Navigation Co. Ltd.** under a long-term charter contract for CPC Corporation, Taiwan. PT. Graha Trisaka Industri is an affiliate of **PaxOcean Group**, Singapore with the shipyard located in Batam, Indonesia. PaxOcean and Robert Allan Ltd. have worked together successfully on a number of projects including dual fuel tug

of RAMParts 2800-DF design for PSA Marine, Singapore. Four other Robert Allan Ltd. TRAKtor 3200-V tugs for Formosa Chemistry and CPC Corporation respectively are also under construction at the same shipyard. The tugs will be designed and constructed to dual Class, CR and ABS, for operation at the Taoyuan LNG Terminal in Taiwan. Five tugs are to be built, with delivery in Q4, 2022.



**Bay-Houston Towing Co.** has taken delivery of the **Robert Allan Ltd.** designed Z-Tech 3080 tug "George M" in early January 2021. Bay-Houston Towing Co. contracted **Gulf Island Shipyards LLC** to build five Z-Tech 30-80 tugs in 2018. "George M" is the last vessel of the batch after the first tug Mark E. Kuebler was delivered in 2019. This latest delivery signifies a successful completion of the major contract. The Z-Tech 30-80 design incorporates Robert Allan Ltd.'s unique RAstar series sponsored hull form in the existing Z-Tech design which greatly enhances the tug's escort capabilities by generating more than 100mt of steering force at 10kn. Bay-Houston Towing Co. is long time Robert Allan Ltd. customer. The company currently operates 14 Z-Tech tugs.

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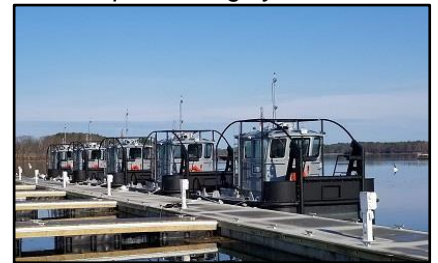
## Tug Boat Market Report – May 2021

**Vane Brothers**, a premier marine transportation provider operating in most major U.S. shipping ports, has taken delivery of the “*Cape Henry*”, a 3,000-horsepower, model bow tug that is the eighteenth Maryland-built towing vessel to join the Baltimore-based company's fleet. Since 2008, sixteen 3,000-horsepower model bow tugs and two 3,000-horsepower push boats have been delivered to Vane Brothers by **Chesapeake Shipbuilding and Naval Architects of Salisbury, Maryland**. Chesapeake is also constructing two more 3,000-horsepower push boats scheduled for delivery in 2021. The “*Cape Henry*” is a true sister tug of the “*Cape Fear*”, which was delivered in October 2020. Both model bow tugs are primarily tasked with towing petroleum barges engaged in the Northeast and Mid-Atlantic coastwise trade. Featuring a design by the late Frank Basile, P.E., of Entech Designs, LLC, the “*Cape Henry*” measures 94 feet long and 32 feet wide with a hull depth of 13 feet. The vessel is equipped with twin Caterpillar 3512 main engines and operates with a JonRie Series 500 hydraulic towing winch. The “*Cape Henry*” is named for the promontory on the Atlantic shore of Virginia that is the southern boundary of the entrance to the Chesapeake Bay.



**Modutech Marine**, of Tacoma, Washington, has gained recognition on meeting the stringent conditions of military contracts. In 2020 they completed a contract to build a fleet of five small tugs. These carry the military designation Work Boat Docking. Modutech's Brian Swindahl describes the vessels, “*The mission of the CNIC Work Boat Docking (WB Docking) is to provide waterborne support at US Navy Installations. The boats are required to have the ability to safely assist vessels including submarines for mooring and dry-docking, open and close security barriers, as well as to tow/push floating port operations support equipment. The boats must include propulsion equipment that is optimized for bollard pull, be highly*

*maneuverable, and include sufficient deck fittings and winches to tow astern, alongside, or push.*” In effect, the **US Navy** wanted a Swiss Army knife that would fit in a mooring pocket. Modutech built a series of five boats that do just that. The rectangular shaped 25' by 14' (7.62 x 4.27m) hulls have an eight-foot draft. The relatively deep draft results from the requirement that these little boats be highly maneuverable. To meet that requirement, they are fitted with a single Schottel SRP 150 azimuthing drive. The drive has a 41.3” (105cm) propeller in a nozzle. The forward-mounted drive is protected by a heavy pipe guard. A pair of fins, with approximately the same depth as the single drive, enhance the maneuverability while providing tracking stability. The powerful heart of these remarkable craft is a single Cummins QSM11 engine, producing 450HP at 2,100RPM. This big power gives the little tug a speed over 7.5 knots and a bollard-pull in excess of 10,000lbs. This power allows the tug to operate in both push and towing methods as required. The steel hull carries an aluminum pilot house with heating and air conditioning. The wheelhouse can be removed for repair or transportation. Similarly, a pair of push knees mounted forward are removable. Arching from the top of the push knees, over the house, and down to the aft deck, a cage allows the boat to pass easily under mooring lines. Normal operation will be with a two-person crew, although there is room for an additional five passengers. The five Cummins-powered Yard Tugs were deployed to naval yards in 2020. (Source: Alan Haig-Brown)



**Nichols Brothers Boat Builders** (NBBB) launched the final tractor tug in a four-vessel series on Thursday, April 29, 2021 for **Foss Maritime**. The M/V “*Rachael Allen*” will join the Foss fleet in May. The ASD90 Class tugs are a Jensen Maritime Consultants, of Seattle, Washington design. The 100' x 40' Z-Drive tractor tugs are built to United States Coast Guard Subchapter “M” regulatory standards, with ABS loadline certification, and UWILD notation. The vessels are equipped with two MTU series 4000 main engines, meeting Tier 4 emission standards, coupled to Kongsberg US255 azimuth thrusters. The propulsion package will produce over 90

tons of bollard pull giving the tug exceptional pulling power and maneuverability. The vessel is outfitted with Mackay Marine Electronics and Markey winches forward for ship assist and aft for barge towing. NBBB continues to invest in upgrading and improving their haul and launch equipment, which has expanded their capabilities considerably over the last decade. During this launch NBBB utilized air bags for added buoyancy to assist in the launch. This allowed for the tug to float off the launch cradle seamlessly before high-tide. Foss welcomed the M/V “*Jamie Ann*” and M/V “*Leisa Florence*” into their fleet in April 2020 and January 2021 respectfully, and AmNav Maritime, a sister company and subsidiary of Saltchuk Marine, welcomed the M/V “*Sarah Avrick*” in September 2020. The M/V “*Rachael Allen*” will join the fleet in May after final outfitting and trials are completed at NBBB's outfitting Pier in Langley, WA.



### Company News

New York-based barge operator **Bouchard Transportation** may need to close its facilities and lay off as many 108 workers if it is unable to find a buyer for the company or its assets. Bouchard has been in debtor-in-possession financing since entering Chapter 11 bankruptcy back in September which has allowed it to continue operations. But according to a Worker Adjustment and Retraining Notification posted this week on the New York State Department of Labor website, Bouchard is currently in the process of seeking a purchaser for *“Bouchard or its assets or its assets”*. If no buyer is found, it may need to start employee layoffs at its Melville, New York *“facility”* beginning July 15 continuing through August 15, the filing said. *“If the company closes the facility, it is expected that the majority of (or all) employees located at the facility will be permanently terminated,”* according to the filing. The development is the latest in an ongoing saga involving Bouchard dating back to a deadly barge explosion off Port Aransas, Texas in 2017 which killed two people. Investigations into the accident called into question Bouchard’s safety culture and kicked off years of legal, financial, and Coast Guard regulatory compliance issues that seemed to come to a head early in 2020 when its document of compliance was lifted by the Coast Guard, leaving crews stranded across the country. Although Bouchard was eventually able to process back pay for its workers and obtain a temporary DOC, problems lingered and the Bouchard eventually filed for Chapter 11 bankruptcy back in September. A U.S. bankruptcy judge earlier this year ordered the immediate removal of the company’s long-time CEO, Morton Bouchard, assigning a new Chief Restructuring Officer. Bouchard Transportation is an independently-owned petroleum tug and barge company established in 1918 and based in Melville, New York. Morton ‘Morty’ Bouchard took the helm of the company in 1992, becoming the fourth-generation of Bouchards to run the business. According to its website, the company operates 26 tugs and 25 tank barges across the United States, Canada and the Caribbean. The majority are double-hulled articulated tug and barge units (ATBs). In April, Bouchard and three current or former officials, including Morton Bouchard, were ordered to pay \$375,000 in restitution to a whistleblower, who happened to be the brother of one of the explosion victims and also worked at Bouchard at the time, after he cooperated in the federal investigation into the 2017 accident. The Worker Adjustment and Retraining Notification notice listed Matthew D. Ray as the Chief Restructuring Officer. (Source: gCaptain)



In Mozambique, **Svitzer** provides harbor towage for **Nacala Logistics** (CLN) at the port of Nacala, servicing the recently built (2016) coal terminal and the main port at Nacala Porto. The operation started on the 1st of September 2020 with the two tugs *“Svitzer Nampula”* and *“Svitzer Nacala”* and when the recruitment of crew and onshore staff is completed, Svitzer in Mozambique will employ 26 in total. Rui Dos Santos, Country Manager for Svitzer in Mozambique explains how setting up operations in a new country is both an exciting and challenging task: *“In a country where setting up formalities and processes takes time, COVID-19 has made things a bit frustrating at times. The biggest challenge however has*

*proved to be setting up operations and living up to the commitments to the customer, whilst ensuring all standards are maintained and that basic operational processes such as supplying stores onboard, arranging inspections and surveys, planning crew changes etc. are functioning. But the team has worked hard to overcome these challenges and ensure a smooth transfer of services and start to the operation in Nacala.”* Rui Dos Santos has many years of experience from the maritime industry and having worked in Mozambique for the past six years, he has learned to be prepared for the unexpected, as he explains: *“There is no doubt that having an in-dept knowledge of the country has been an advantage – I knew from the beginning what the challenges would be and also how to deal with them, although the COVID-19 made many things a bit more challenging – like mobilizing the tugs operating in Nacala.”* The two tugs operating in Nacala were mobilized from Svitzer’s operations in Sohar Port in Oman, where new tugs had been ordered. However, mobilizing the tugs was not without challenges due to COVID-19. With careful planning and support from the global head office in Copenhagen the Svitzer regional team made it happen. Two full sets of crews from Egypt were assembled and placed under quarantine for two weeks and upon arrival of the brand new 80TBP tug *“Svitzer Sohar”* in Port Said in Egypt, the crews signed onto the tug and left Egypt late on the evening of 26 April, joining the midnight convoy south through the Suez Canal. On arrival in Sohar Port, Oman the tug berthed next to the two Nacala tugs that had been prepared and completely sanitized for the crews. The crews then stepped across onto their new tugs and started preparing for their passage to Mozambique. *“Svitzer Nampula”* and *“Svitzer Nacala”* safely arrived in Nacala in June and performed their first commercial job on 1 September. *“Providing a world class service to our costumer, CLN, growing together in Nacala, promoting and spreading our name throughout the region and work in every port and terminal in the country – that is my dream,”* Rui Dos Santos ends.

# Marcon International, Inc.

## Tug Boat Market Report – May 2021

The **Panama Design Center (PDC)** is welcoming new residents these days, as Svitzer Americas has opened its new regional headquarters in Panama City as part of **Svitzer Americas'** ambition to move even closer to its customers and operations and further strengthen its position in the region. Svitzer Americas has been headquartered in Miami, US for many years, but in early 2020 it was decided to relocate to Panama and move into the Panama Design Center, which also houses other entities of the Maersk Group including Sealand Americas, APM Terminals, Hamburg-Sud, Twill and Maersk Liner Operations Clusters. While the opening has been long awaited, it does of course take place in accordance with local health and safety guidelines with regards to occupancy limitations. Commenting on the relocation to Panama, Arjen van Dijk, Managing Director Svitzer Americas said: *"Panama is an important, strategic maritime hub with good infrastructure and easy connections to nearby countries and ports. For Svitzer, moving the regional headquarter to Panama will further strengthen our presence in the Americas region and bring us even closer to our customers and operations in the region. We see significant growth potential in the region within both harbor and terminal towage and moving the regional headquarter to Panama supports our growth ambitions. Furthermore, we will have access to recruiting some of the best people, as Panama in general has a large and very skilled and experienced workforce because of its position as a central hub for the maritime industry in the region."* Svitzer Americas is heavily engaged in the region with harbor towage and terminal towage as the main segments. Svitzer Americas operates more than 80 vessels in ports and terminals in 12 different countries across the region and customers can thus benefit from a global ownership, presence and experience combined with in-dept regional and local knowledge.



As part of its continuous efforts to solidify and strengthen its position in Argentina and to further integrate the Svitzer brand name, leading global towage provider Svitzer has changed its company name in Argentina from **Madero Amarres S.A.** to **Svitzer Argentina S.A.U.** Besides supporting the efforts to further integrate the Svitzer brand name, the name change also underlines Svitzer's commitment to its operations in Argentina. Recently, Svitzer Argentina has strengthened its position in the country by securing a four-year contract with **Oiltanking**. As of 1 April 2021, the "Svitzer Honour" has attended and serviced the two

monobuoys "Punta Ancla" and "Punta Cigüeña" in Puerto Rosales. The Oiltanking EBYTEM S.A. terminal has these two single points of mooring for crude oil movements in a depth of app. 18 meters approximately. Commenting on the contract with Oiltanking, Kees van den Borne, Managing Director Svitzer Argentina says: *"At Svitzer, we are committed to our operations and customers in Argentina, and I am very pleased that we have been awarded this important contract with Oiltanking. Towage is a local business that calls for in-depth regional and local knowledge. As a global towage provider, we strive to turn high global safety standards, operational knowledge and industry insights into safe, reliable and efficient towage services for our customers in the local Argentinean ports where we operate."* Svitzer has been operating in Argentina since 2016 and services its customers with nine vessels in four ports – Buenos Aires, Bahia Blanca, Rosario and Necochea. Svitzer Argentina employs in total 140 people onshore and offshore.

Boluda Towage Vice president Vicente Boluda Ceballos and Jim Iskes of Dutch company Iskes Towage & Salvage have signed the definitive purchase agreement of Iskes Towage & Salvage in Amsterdam today (16 February). The purchase strengthens Boluda Towage's position as a market leader in port towage and sustainable maritime solutions in Europe, opening up further expansion into new ports in the Netherlands and Germany, and entry of the company into Portugal. Iskes Towage & Salvage will operate as a separate entity directly under Boluda's headquarters in Valencia, thus continuing to manage the abovementioned port towage activities. The acquisition of this company will strengthen and expand Boluda Towage's offshore activities in northwest Europe, with the Baltic, Kiel Canal and Polish markets as the principal focus.





# Marcon International, Inc.

## Tug Boat Market Report – May 2021



Vicente Boluda Ceballos, **Boluda Towage SL**, and Jim Iskes, owner of **Iskes Towage & Salvage**, recently signed in Amsterdam an agreement to acquire the port towage activities of Iskes in Eemshaven (the Netherlands), Lubeck (Germany), and Lisbon (Portugal) as well as its offshore activities, together with the management and office staff in the head office in IJmuiden, the Netherlands. Iskes will remain a separate entity directly under Boluda's headquarters in Valencia, Spain, and as such will continue to manage the aforementioned harbor towage activities. It has also been agreed that Iskes will focus on strengthening and further expanding the offshore activities of Boluda in North West Europe, with a close watch on the Baltic market, Kiel Channel and Poland. After the official closing of the transaction, planned early February, the local management team of Iskes Towage & Salvage will be headed by Ronald Vergouwen as Managing Director. Former owner Jim Iskes will stay on board as strategic advisor. Commenting on the sale, Iskes owner Jim Iskes, stated: *"We are very happy to join the Boluda Group because it is also a family-owned company, with short direct lines and a similar spirit. We could not be more pleased with this combined organization and asset portfolio. Although we find ourselves in exceptionally challenging times at this very moment, we are committed to consolidate Boluda's future prospects, to continue strengthening Boluda's position as European tugboat market leader, and to open up new opportunities with our innovative attitude."* Mr. Vicente Boluda Fos, Chairman at Boluda Corporacion Maritima commented: *"We have been long friends of Iskes and we value their entrepreneurial spirit and pioneering vision..."* Vicente Boluda Ceballos, Executive Vice President of Boluda, added: *"We have recently experienced the benefits of the synergies resulting from this partnership. For example, the Iskes tug 'Ginger' has assisted our London port operation in recent weeks. Having exciting times ahead of us we certainly intend to deploy Iskes's professional crews and experienced employees on future projects."*

**SAAM**, a company that provides port, logistics and tugboat services in America, completed the purchase process of 70% of **Intertug's** post capitalization shares. With this investment of US \$ 49.7 million, SAAM Towage enters the Colombian market with its towing service, strengthening its presence in Mexico and Central America, with a strong base to develop its activities in the Caribbean, a region where Intertug has a recognized presence commercial and operational. *"With this operation we strengthen our position as the leading trailer operator in America, in line with our strategy of being leaders in the consolidation process that the industry is experiencing. Today we have a unique coverage in the continent and with Intertug we are taking a step further, entering Colombia"*, said the general manager of SAAM, Macario Valdés. Now the integration process will begin to *"capitalize on growth opportunities, implement our operational model and processes and take advantage of the synergies we have with the 11 countries where we are present with SAAM Towage,"* added the executive. The purchase was financed with a combination of debt and equity. The entry into the property of Intertug is made through a capital increase and purchase of shares. This will give the company an adequate capital structure to advance its growth and efficiency plans. Intertug has more than 25 years of experience providing port towing services, offshore services and special services. It has a fleet of 25 vessels and performs more than 18,000 tasks a year. SAAM Towage has more than 170 tugs at 84 ports in the Americas and completes over 100,000 maneuvers for around 37,000 vessels per year, thus positioning it as one of the continent's leading providers of towage services. These services include berthing and deberthing services for ships; assistance, salvage and towage for barges and civil construction projects; specialized services for ships at off-shore terminals and anchoring oil and gas platforms



The Managing Director of **SAAM Towage**, Hernán Gómez, celebrated the launch of operations in Peru, which will continue to strengthen the company's position in the Americas. *"We are taking the first steps at the Port of Callao, which lets us provide better coverage on the southern Pacific coast. We are interested in this market and foresee leveraging our broad network in the region. Our strategy is to preserve our leadership position and play an important role in the industry's consolidation process,"* the executive commented. SAAM Towage already relocated one tug (*"RAM Valkyria"*) to the Port of Callao and is in the process of moving a second unit (*"RAM Albatros"*). Both will assist ships with berthing and deberthing in the harbor. In addition, SAAM has already

opened offices in the city to meet the needs of this competitive market and have hired highly specialized personnel.

# Marcon International, Inc.

## Tug Boat Market Report – May 2021

**CMB** and **TSUNEISHI** want to develop the hydrogen internal combustion engine (H2ICE) technology for the Japanese industrial and marine market. CMB's subsidiary CMB.TECH has built up extensive know how over the years and has successfully developed concrete applications with dual fuel and monofuel hydrogen engines. To accelerate the adoption of this revolutionary technology, CMB and TSUNEISHI have agreed to invest additional capital in the Bingo Research Institute and change the name to **JPN H2YDRO CO.,LTD** for the import, marketing and engineering service of H2ICE solutions in Japan. JPN H2YDRO CO.,LTD will establish a H2ICE Application Center in Japan. HydroBingo & HydroPhoenix CMB and TSUNEISHI have already been working together, with the development of the "HydroBingo", the next generation 80 passenger ferry that uses hydrogen as marine fuel for propulsion. Both companies will build a hydrogen-powered tugboat, the "HydroPhoenix". This landmark development and Asia's first hydrogen tugboat will increase local demand for hydrogen and catalyse the construction of further sister ships and other industrial hydrogen applications. Furthermore, both companies will also focus on the development of hydrogen-powered equipment for the land-based port industry and ships of different categories, such as support ships for offshore wind farms, like CTV, SOV and CSOV, through the H2ICE application center, as mentioned above. BeHydro dual fuel engines Since 2017, CMB has developed a wide variety of hydrogen-powered engines and applications, including the world's first 1MW dual fuel hydrogen diesel engine developed by BeHydro which is a joint venture vehicle with ABC Engines. The new joint venture will be the sole agent for the import of BeHydro engines in Japan. Ambassador, Roxane de Bilderling, Embassy of Belgium in Japan: *"It was a great honor to witness the signing ceremony of the MOU between CMB N.V., Tsuneishi Facilities & Craft Co., Ltd. and Kambara Kisen Co., Ltd. on 20 April 2021. I was particularly pleased to hear about the business partnership between the three companies and I believe that this partnership will enhance the business case for hydrogen fuel propulsion engines in the shipping industry in Japan and support the Green Growth Strategy of the Japanese government. Green energy is crucial in pursuing the fight against Climate Change and ensuring a sustainable development for all. This collaboration is an excellent example of how Belgium and Japan can cooperate for a better future and I look forward to many more of this kind of cooperation between our two countries."* CEO of CMB, Alexander Saverys, talks about the new joint venture: *"With this new joint venture, CMB re-affirms its commitment to the Japanese market and its support for Japan's vision of a hydrogen society. We are honored to partner up with the well-respected Kambara family and look forward to developing this new line of business with the TSUNEISHI Group. This will allow us to accelerate our business plan on our journey to a zero carbon world."* President of TSUNEISHI Craft & Facilities, Jun Kambara, talks about their ambitions: *"We have been working to contribute to society with shipbuilding technology. We are proud and rewarding to take over this identity and make an effort to get closer to the carbon neutral world as soon as possible at this company that works with CMB. We will continue to develop for the realization of the coming hydrogen society."* President Director of Kambara Kisen, Hirotatsu Kambara, talks about the collaboration: *"We are so excited about our strategic partnership to further enter the market of carbon neutral business engineering mainly developed by alternative fuels for marine and port industries. I am confident that this new joint venture will achieve our immediate project of completing the HydroPhoenix, Asia's first hydrogen-powered tugboat."* (Photo: Port of Antwerp H2 tugboat)

